

Message

From: Mack, Sara [mack.sara@epa.gov]
Sent: 4/25/2019 9:21:04 PM
To: AO OPA OMR CLIPS [AO_OPA_OMR_CLIPS@epa.gov]
Subject: Daily News Clips 4/25

Daily News Clips

April 25, 2019

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Environmental Working Group: EPA's Proposed PFAS Guidance Falls Far Short on Public Health Protection and Cleanup

Governing: As States Weigh Banning a Popular Pesticide, EPA Fights to Keep It on the Market

Minnesota Public Radio News: Chemical Safety Board calls on EPA to update hydrofluoric acid study in wake of Husky Fires

Safety and Health Magazine: Advocacy groups sue EPA over worker exclusion from methylene chloride ban

Water

Bloomberg Environment: Wall Street Likes Water Projects Thanks to EPA Loan Programs

The Hill: Dirtiest week for water in EPA history

Inside EPA: Eased EPCRA Provisions May Bolster EPA Plan To Decline CWA Spill Rule

Legal News Line: New York announces plans to sue EPA over issue of certificate of completion for Hudson River cleanup

PoliticoPro: EPA releases groundwater cleanup guidance for PFOA and PFOS

Administration

Boating Industry

Commerce Secretary Ross and EPA Administrator Wheeler To Speak at ABC 2019

<https://boatingindustry.com/news/2019/04/25/commerce-secretary-ross-and-epa-administrator-wheeler-to-speak-at-abc-2019/>

Staff

Posted: April 25, 2019

NMMA announced that U.S. Secretary of Commerce Wilbur Ross and Environmental Protection Agency (EPA) Administrator Andrew Wheeler will address American Boating Congress (ABC) attendees on Wednesday, May 15. In addition, NMMA recently released the initial agenda for ABC 2019, which is available at the following link:

<http://www.nmma.org/advocacy/abc/events>.

Secretary Ross and Administrator Wheeler lead agencies that have a significant impact on the recreational boating industry. The U.S. Commerce Department oversees everything from trade and tariffs to recreational fishing policy, while EPA is responsible for engine emissions and certification requirements to fuel policy.

Wilbur Ross was sworn in by Vice President Mike Pence as the 39th Secretary of Commerce on February 28, 2017. Secretary Ross is the principal voice of business in the Trump Administration.

In late February, the U.S. Senate confirmed Andrew Wheeler as the 15th Administrator of the EPA. President Donald J. Trump had announced his appointment as the Acting EPA Administrator on July 5, 2018. Wheeler had previously been confirmed by the U.S. Senate as the EPA Deputy Administrator on April 12, 2018.

Wheeler began his career during the George H. W. Bush Administration as a Special Assistant in EPA's Pollution Prevention and Toxics office.

NMMA will announce additional speakers in the coming days.

E&E News

White House deletes climate language from disaster doc

<https://www.eenews.net/eenewspm/2019/04/25/stories/1060218625>

Maxine Joselow

Posted: April 25, 2019

The White House scrubbed language about how climate change fuels more extreme weather events from draft EPA guidance, newly released documents show.

An earlier draft of the EPA guidance on planning for natural disasters contained language about how climate scientists have attributed recent extreme weather events to global warming. Key portions of that language were nixed during an interagency review led by the White House Office of Information and Regulatory Affairs (OIRA).

"Recorded changes in temperature, precipitation, and wind patterns, for example, are causing extreme weather events, attributed to climate change, that are creating new risks to communities and sites," the draft said. "Recently, there have been more frequent and intense storms, flooding, storm surges, droughts and wildfires."

During the interagency review, OIRA scrubbed the phrases "attributed to climate change" and "recently, there have been more." The altered draft was posted today to regulations.gov, the federal government's online clearinghouse for regulatory documents.

It's difficult to pinpoint climate change as the cause of a particular disaster. But climate scientists can say with increasing certainty that global warming is driving increases in the frequency or severity of extreme rain and heat events across the United States (*Climatewire*, Feb. 7).

The Fourth National Climate Assessment, which was produced by 300 scientists across 13 federal agencies, stated that "some extreme weather and climate events have increased in recent decades, and new and stronger evidence confirms that some of these increases are related to human activities."

Amit Narang, a regulatory policy advocate at Public Citizen, blasted OIRA for the changes.

"There appears to be a policy at OIRA to gag the EPA from referencing climate change, even when EPA discusses impacts that clearly stem from climate change, given how often OIRA has deleted the words 'climate change' when it has reviewed EPA actions under the Trump administration," Narang said.

The guidance document was aimed at providing "helpful planning considerations and steps that local and state officials and other stakeholders can take to prepare for managing the debris/wastes generated by natural disasters (e.g., floods, earthquakes, hurricanes, tornadoes)," according to EPA.

To be sure, OIRA did not categorically remove all climate language from the document. For instance, it kept an acknowledgment that "climate change may intensify flooding across the U.S., even in areas where total precipitation is projected to decline."

Risk Management Plan

In addition to nixing the climate language, OIRA removed a paragraph from the guidance document about EPA's Risk Management Plan (RMP) rule. EPA has proposed rolling back the Obama-era rule, which was meant to help chemical companies and communities deal with hazardous materials at industrial sites in the wake of natural disasters.

In 2017, Democrats criticized the agency for suspending the rule before Hurricane Harvey triggered a fire at a chemical plant outside Houston (*E&E Daily*, Sept. 28, 2017).

The deleted paragraph stated that under the RMP rule, "facilities that use certain extremely hazardous substances must identify the potential effects of a chemical accident, develop steps to prevent an accident, establish emergency response procedures should an accident occur, and summarize these measures in a Risk Management Plan. These plans provide valuable information to local fire, police and emergency response personnel to prepare for and respond to chemical emergencies in their community."

Narang said that "clearly, this guidance document makes the case for needing to keep the RMP rule. And OIRA didn't like it, so they got rid of it."

He added, "If EPA had kept the RMP rule, it would be crucial in terms of accomplishing the objectives of the guidance, which is to make sure communities are prepared to deal with the aftermath of disasters and toxic threats that are released into the environment."

EPA and the White House didn't immediately respond to requests for comment this afternoon.

EcoWatch

Ethics Investigations Opened into Actions of EPA Head Wheeler, Top DOI Officials

<https://www.ecowatch.com/ethics-investigations-epa-2635534651.html>

Olivia Rosane

Posted: 2:35pm, April 25, 2019

Ethics investigations have been opened into the conduct of senior Trump appointees at the nation's top environmental agencies.

The two investigations focus on Environmental Protection Agency (EPA) Administrator Andrew Wheeler and six high-ranking officials in the Department of Interior (DOI), The Hill reported Tuesday. Both of them involve the officials' former clients or employers.

"This is demonstrative of the failures at the very top of this administration to set an ethical tone," Campaign Legal Center Ethics Counsel Delaney Marsco told The Washington Post of the DOI investigation. "When people come to work for government, they're supposed to work on behalf of the public. It's a betrayal of the public trust when senior political appointees seem to give privileged access to their former employers or former clients."

Here's a run-down of the two investigations.

Andrew Wheeler

The House Oversight and Government Reform Committee is investigating Wheeler for failing to disclose that he lobbied for Darling Ingredients within two years of assuming his post at the EPA, CNN reported Wednesday.

The Ethics in Government Act mandates that all officials must disclose the sources of any money over \$5,000 earned in the two years before their appointment, but Wheeler failed to disclose his work on behalf of the chemical company in 2015 and 2016 while working for Faegre Baker Daniels Consulting. The committee cited Faegre's quarterly disclosure forms as proof that Wheeler had not listed the earnings.

"These documents indicate that you may have improperly omitted Darling from your financial disclosure, and they raise concerns that you may have failed to identify other clients who paid for your service as a lobbyist during the period covered by your disclosure report," House Oversight chairman Elijah Cummings wrote in a letter to Wheeler informing him of the investigation.

Darling supplies ingredients for fertilizers, fuel and pet and livestock food, among other products, according to The Hill.

Wheeler also met with Darling in June 2018, while he was serving as deputy administrator at the EPA, according to CNN, but an agency lawyer said this did not violate ethics laws. The EPA did not comment on the investigation to the media and instead said it would respond through the "proper channels," according to CNN.

The DOI Six

Six officials at the DOI are being investigated by the department's Office of Inspector General over meetings with former employers or clients on department-related business, The Washington Post reported Tuesday.

President Donald Trump signed an executive order early in his term saying all appointees must recuse themselves from matters involving former clients for two years. But the Campaign Legal Center sent a letter to the DOI watchdog in February detailing how six officials had violated that pledge. The Office of Inspector General wrote back to the center April 18 to say an investigation was in process.

"The department takes ethics issues seriously," Interior spokeswoman Faith Vander Voort told The Washington Post in an email.

The letter was sent three days after the Office of Inspector General announced it was opening an investigation into newly-confirmed Interior Secretary David Bernhardt after receiving various complaints about his potential conflicts of interest, The Washington Post reported April 15. Bernhardt replaced Ryan Zinke, who resigned as Interior Secretary after an ethics investigation into his conduct was passed on to the Justice Department.

Federal law requires officials to disclose any client over the past two years that paid them more than \$5,000 ...Andrew Wheeler apparently failed to disclose a former lobbying client that paid him more than \$5,000<https://thehill.com/policy/energy-environment/440299-epa-administrator-failed-to-disclose-former-lobbying-client> ...

Here is a brief outline of officials implicated in the most recent investigation, as summarized in The Huffington Post.

1. White House liaison Lori Mashburn, who attended two private events hosted by her former employer and right-wing think tank the Heritage Foundation
2. Senior Deputy Director for Intergovernmental and External Affairs. Ben Cassidy, who participated in agency meetings on issues he had lobbied the department about on behalf of the National Rifle Association, including trophy hunting and the designation of national monuments

3. Assistant Secretary for Insular and International Affairs Doug Domenech, who met with his former employers, a Koch-link think tank called the Texas Public Policy Foundation, about issues over which the foundation was suing DOI
4. Former Energy Counselor to Zinke Vincent DeVito, who attended a meeting with a former energy client
5. Deputy Director of Interior's Office of Intergovernmental and External Affairs Timothy Williams, who participated in a video call with his former employer, who is vice president of the Koch-funded Americans for Prosperity
6. Director of Interior's External Affairs Office Todd Wynn, who had a phone call with a committee member of the oil-funded Council of State Governments, of which he had also been a committee member before taking the DOI job

"An agency's ethical culture depends on ethical leadership. Former Secretary Ryan Zinke and Secretary David Bernhardt, now under investigation himself for ethics violations, have failed to demonstrate adequate ethical behavior at the top of Interior," Matsco said in a statement reported by The Huffington Post. "We hope this investigation will answer whether these officials are working on behalf of the American people or on behalf of the interests that used to pay their salary."

Inside EPA

EPA seeks experts to review new economic model

<https://insideepa.com/daily-feed/epa-seeks-experts-review-new-economic-model>

Staff

Posted: April 25, 2019

EPA is seeking experts to peer review a whole economy model that agency economists are developing to assess rules' costs, an effort that seeks to advance long-time calls from Republicans, industry and others to adopt to better account for rules' costs though agency advisors have previously warned officials to proceed cautiously.

EPA announced in an [April 24 Federal Register](#) that its Science Advisory Board (SAB) "is seeking nominations of environmental economists and other experts with extensive experience building and using [computable general equilibrium (CGE)] models."

The notice adds that the experts will form an *ad hoc* panel "charged with reviewing a CGE model developed by EPA's National Center for Environmental Economics (NCEE) for use by agency analysts for the economic analysis of environmental regulations. Experts selected for the panel will be asked to review the model code and documentation, run the model and independently verify how it works to respond to NCEE's charge questions."

Agency science advisors in the fall of 2017 transmitted to then-Administrator Scott Pruitt a cautionary report agreeing that CGE models would be a useful supplement to the agency's economic analyses of proposed rules, but warning that there are many [challenges that make the models' use infeasible](#).

Under pressure from Republicans, EPA had asked the *ad hoc* panel of experts to consider advantages and disadvantages of undertaking whole economy modeling, and in particular, to estimate both social and economic costs.

The agency has in the past used CGE models only in a handful of limited applications. Industry representatives and congressional Republicans argue that EPA's analyses regularly understate the costs of its rules, with a particular focus on EPA's air rules.

Although the advisors' 2017 report suggested it will not be easy for the agency to quickly adopt whole economy modeling, the administration's budget request for fiscal year 2018 sought a \$662,000 increase for the agency's Regulatory/Economic, Management and Analysis Program, money intended in part to update agency guidelines for assessing rules' costs and benefits.

While the new CGE model could in the past have gone to a standing SAB subcommittee of environmental economists, SAB is creating a new *ad hoc* panel because the Trump EPA disbanded several standing committees last year, including the Environmental Economics Advisory Committee.

Review of the new model comes as several major universities are creating a new panel of environmental economists, known as the External Environmental Economics Advisory Committee in response to EPA's disbanding of SAB's standing economic panel.

Consisting of environmental economists with universities like Yale, Duke, the University of California Berkeley and others, as well as the think tank Resources for the Future, the new group "will operate independently of the federal government, reviewing proposed regulations and offering recommendations to help promote public health protection, economic cost-effectiveness and sound science," according to an April 23 press release from the University of Southern California (USC).

"Our mission is to provide independent advice on the state-of-the-science with regard to the benefits, costs and design of the EPA's environmental programs," Antonio Bento, a professor of public policy and economics at USC and one of the new committee's members says in the release.

The group is funded by the Luskin Center for Innovation at UCLA, Roberts Environmental Center at Claremont McKenna College and The Sloan Foundation and "intends to operate until the EPA reconstitutes an internal environmental economics advisory committee composed of independent economists."

The new committee's effort mirrors a [similar panel](#) formed by the Association of Environmental Engineering and Science Professors last year, after Pruitt issued new policies on EPA advisory committees' membership in October 2017.

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Inside EPA

EPA Seeks to Update Cancer Risk Guide, Plans New Non-Cancer Guide

<https://insideepa.com/daily-news/epa-seeks-update-cancer-risk-guide-plans-new-non-cancer-guide>

Maria Hegstad

Posted: April 24, 2019

Administrator Andrew Wheeler is asking the agency's science advisors for advice on how to update EPA's guide for assessing chemicals' cancer risks, as well as for crafting new guidance for assessing non-cancer risks and for better communicating risks, suggesting an effort to extend the administration's deregulatory approach to its risk assessment practices.

"The agency anticipates asking for [Science Advisory Board (SAB)] advice regarding upcoming actions related to an update to the 2005 EPA *Guidelines for Carcinogen Risk Assessment*, creation of guidelines for non-cancer risk assessment and specific advice on improving agency risk communication," Wheeler writes in an [April 19 letter](#) to SAB members. Wheeler's letter responds to a 2018 request from SAB seeking to review the science underlying a series of pending deregulatory measures, though the [administrator rejected](#) all but one of the board's requests.

However, he also asked SAB for advice on how to revise EPA's risk assessment practices, including the agency's guidelines for assessing cancer risks.

Because many decisions involving chemicals are based on animal toxicology studies in which lab animals are exposed to amounts far greater than humans experience in the environment, assessors extrapolate study information to model dose-response at human exposure levels.

EPA's existing guidelines on cancer risk assessment direct that agency risk assessors use linear extrapolation -- which assume no safe level of exposure -- as a default, when there is insufficient information about how a chemical causes cancer biologically, or when the chemical is considered mutagenic. Nonlinear extrapolation can be used if there is sufficient evidence that a chemical has a non-mutagenic biological mechanism (MOA) for producing cancer. Industry and other regulated entities have long protested the implementation of this guidance, particularly by the Integrated Risk Information System (IRIS) program, whose assessments have rarely stepped away from the linear defaults.

Critics charge this results in overly-stringent risk analyses that drive strict policies. IRIS leaders and its proponents argue that the approach is health-protective in the face of uncertainty about how most chemicals cause cancer.

Any revision to the cancer guideline could also raise doubts about the future of two pending IRIS assessments for hexavalent chromium (Cr6) and arsenic as earlier draft versions of both assessments used linear dose-response approaches.

IRIS released a systematic review protocol for the Cr6 assessment last month and is taking public comment through April 29. According to the latest update on its agenda, EPA indicates it plans to release a draft assessment for public comment in the first quarter of fiscal year 2021.

The IRIS outlook document says the program plans to release the arsenic systematic review protocol May 17. The National Academy of Sciences, which will review the draft assessment, has scheduled a July 16 meeting to review the protocol.

Both the draft assessments have prompted significant pushback from industry and other regulated entities, who charge the substances' MOAs do not warrant linear risk modeling. They also fear that if the draft assessments are finalized in their current forms, they will drive strict -- and costly -- new regulatory requirements that will be difficult to implement.

Harmonized Approaches

The language in Wheeler's letter provides greater clarity to the scope of a new [guidelines development project](#) that the administrator's office recently asked EPA's Science Technology Policy Council (STPC) and Risk Assessment Forum (RAF) undertake.

Sources say the request, presented at a recent STPC meeting by acting research chief Jennifer Orme-Zavaleta, was so confusing that STPC asked for more information before commencing the project.

Still, a document outlining the original request -- reviewed by *Inside EPA* in early April -- provides some examples of issues Wheeler seeks to address through new guides and is consistent with updating EPA's existing guidance on cancer and non-cancer risk assessment.

Responding to a request from Wheeler, EPA's Science Advisor recommended in the document that STPC "consider a set of hazard and dose-response issues and decide on which issues the RAF should develop harmonized approaches across the agency."

The RAF, a group of risk assessors from various agency programs, will develop "EPA-wide guidance where risk-assessment practices diverge across EPA offices that conduct hazard and dose-response evaluations," the document says.

But the group in the past has worked at a glacial pace, making it unlikely that the guidelines will be revised in time to address either the hexavalent chromium or the arsenic assessment -- though the internal document seeks a draft version to be completed by "late Fall" of 2019 and a final version by December 2020 "but sooner if possible."

The internal agency document also includes several examples of issues it seeks to harmonize, including "linear vs. threshold dose response extrapolation, non-cancer hazard identifiers, and updating reference dose and reference concentration processes."

While Wheeler's letter appears to suggest that EPA does not have guidance for non-cancer risk assessment, over the years, RAF has published numerous guides on how EPA assessors should conduct such risk analyses, such as the 2002 "Review of the Reference Dose and Reference Concentration Processes," the 1996 "Guidelines for Reproductive Toxicity Risk Assessment," and 2012's "Microbial Risk Assessment Guideline" and "Benchmark Dose Technical Guidance."

The documents indicate Wheeler seeks to develop consistent risk assessment guidance across the agency. When EPA faced similar concerns in the 1980s -- different program offices were developing different assessments of the same environmental pollutants, resulting in different decisions on the same chemical by different parts of the agency -- EPA responded by creating the IRIS program. Former EPA scientists who developed IRIS say that the goal was to create a centralized body for creating dose-response analyses in a consistent manner. These risk estimates were then published for the program offices to use in their risk assessments.

But the Trump EPA has largely sought to sideline the IRIS program, which industry and other critics say crafts overly conservative risk estimates that drive overly strict regulations.

Meanwhile, Wheeler's letter explains in a footnote that "EPA recently formed an agency-wide Risk Communications Work Group in order to elevate and clarify how EPA communicates about risk. This is a top priority for the Administrator, and this effort may present opportunities for additional engagement with the Board."

Improving EPA's risk communications has been a priority for Wheeler since he began serving as acting administrator last year. His efforts, however, have been undercut by questions about Trump officials' conflict of interest, and a lack of trust in the Trump EPA. -- *Maria Hegstad*

Air

E&E News

Lawsuit aims to block Denver's ozone downgrade

<https://www.eenews.net/eenewspm/stories/1060212833/search?keyword=EPA>

Sean Reilly

Posted: April 25, 2019

A Colorado industry group has mounted an eleventh-hour legal challenge aimed at averting a downgrade in the ozone attainment status for the fast-growing Denver area.

The lawsuit, filed yesterday in state court by Defend Colorado, seeks to force a state regulatory commission to hold a public hearing to develop "the most accurate and complete inventory" possible of pollution sources affecting air quality; the group also wants a judge to declare that Gov. Jared Polis (D) broke the law by allegedly interfering in the commission's statutory obligations under the Colorado Air Pollution Prevention and Control Act.

The group's ultimate target, however, is Polis' decision last month to drop a requested extension for bringing the Denver Metro/North Front Range area into compliance with EPA's 2008 ground-level ozone standard. The area, home to more than 3.3 million people, is in "moderate" nonattainment with the 75 ppb standard. Under the five-point sliding scale EPA uses to track compliance, a downgrade to "serious" nonattainment would entail stricter permitting requirements for oil and gas operations and other industries.

"Such a downgrade would deprive Colorado of the flexibility to improve its air quality based on the unique conditions in Colorado and the priorities of Coloradans," the newly filed suit says. The state had sought the one-year extension under then-Gov. John Hickenlooper (D) last June; EPA then tentatively agreed to approve it in November. In announcing the about-face, Polis said the state is "moving forward to make our air cleaner now" (*Greenwire*, April 1).

Defend Colorado, which describes itself as a business and industry organization, argues that emissions from foreign sources and "exceptional events" outside of regulators' direct control are responsible for the state's ozone compliance problems.

Last month, however, the Colorado Air Quality Control Commission declined to rule on the group's petition for a complete emissions inventory on the grounds that it lacked legal standing, according to the suit. The suit also accuses Polis of "unilaterally and privately" ordering state environmental officials to avoid pursuing any "demonstrations" geared to showing the impact of international emissions or exceptional events on Colorado's air quality.

A message left with Polis' office seeking comment on the suit this afternoon was not immediately returned.

"We are reviewing the complaint, but stand behind the commission's actions as proper and within the scope of its authority," Trisha Oeth, director of environmental boards and commissions at the Colorado Department of Public Health and Environment, said in a statement released after this story was published.

If the state doesn't certify by May 1 that the Denver area meets the 75 ppb standard, EPA must go ahead with the nonattainment downgrade, the suit says. Ozone, a lung irritant that is the main ingredient in smog, is spawned by the reaction of nitrogen oxides and volatile organic compounds in sunlight.

Environmental groups have applauded Polis' move. In a federal lawsuit filed last month before it was known that Polis had dropped the extension request, WildEarth Guardians alleged that EPA should have made a decision on the Denver area's compliance status in January (*Greenwire*, March 27). That suit is pending in U.S. District Court for the District of Colorado.

E&E News

Navajo Nation awarded \$89K to test air near uranium sites

<https://www.eenews.net/greenwire/stories/1060217671/search?keyword=EPA>

Philip Athey

Posted: April 25, 2019

EPA has awarded the Navajo Nation Environmental Protection Agency \$89,260 to investigate how abandoned uranium mines are affecting air quality in the Cove, Ariz., area.

The move will allow the Navajo Nation to set up four monitoring locations around the Arizona community as well as an outside monitoring station to act as a control, where weekly air quality samples will be taken.

Local residents have feared that dangerous radioactive materials, as well as lead and arsenic, have been blown into their community by winds coming from the direction of the abandoned mines.

"This air monitoring study will examine whether dust from abandoned uranium mines in the Cove area are transporting trace metals and radionuclides," said Oliver Whaley, executive director for the Navajo Nation EPA, in a press release. "It is important for us to learn the vulnerabilities to people and the environment."

The funding comes from a nearly \$1 billion settlement with Anadarko Petroleum Corp. to clean up 50 Cold War-era uranium mines, roughly half of which are in the Cove area. Anadarko agreed to the settlement on behalf of the previous mine owner, Kerr-McGee Corp., which Anadarko acquired in 2006.

According to EPA's statement, the funds will also be used for the "purchase and placement of a meteorological station at the Cove Chapter House" and other community outreach efforts.

In the EPA statement, Region 9 Administrator Mike Stoker said, "By working with the community, we can address these concerns and help ensure people in the Cove area have important information about the air they breathe."

ThinkProgress

Trump claims U.S. has 'record clean' air. A new report says otherwise.

<https://thinkprogress.org/trump-air-pollution-b346f070f8bd/>

Kyla Mandel

Posted: 11:24am, April 25, 2019

People across the United States are breathing increasingly polluted air, according to the American Lung Association's annual [State of the Air report](#). Climate change is a major contributor to worsening air quality, and the Trump administration's ongoing efforts to roll back environmental protections could make it even worse.

The American Lung Association has been tracking air quality for two decades, and the air pollution increase found in this year's report is worse than the past two reports, which examined air quality dating back to 2013. This runs counter to repeated claims made by President Donald Trump in which he's stated, "I want crystal-clean air," and asserted that the U.S. has "record clean" air.

Between 2015 and 2017, more than 141 million people — one in four Americans — were exposed to dangerous particle pollution and unhealthy ozone levels, also known as soot and smog. This represents an increase of 7.2 million more people compared to last year's report.

"In many areas of the United States, the air quality is worsening, at least in part because of wildfires and weather patterns fueled by climate change," Harold Wimmer, president and chief executive of the American Lung Association, said in a statement.

"This increase in unhealthy air is eye-opening, and points to the reality that the nation must do more to protect the public from serious, even life-threatening harm," Wimmer continued. "There is no clearer sign that we are facing new challenges than air pollution levels that have broken records tracked for the past twenty years, and the fact that we had more days than ever before when monitored air quality reached hazardous levels for anyone to breathe."

Smog has worsened with climate change, the report notes. All three years examined in this report were the warmest years ever recorded, and as temperatures increase, ozone pollution forms more easily and is harder to clear away. Described by the American Lung Association as "essentially causing a sunburn of the lungs," health impacts include shortness of breath, coughing, and asthma attacks.

Particle pollution is often the result of burning coal, and when the microscopic particles are lodged deep in the lungs, they can enter the bloodstream and cause health impacts such as heart attack, stroke, and cancer. According to the report, more cities are experiencing days with short-term spikes in this type of pollution.

Of the 25 most polluted cities identified by the American Lung Association, eight have now reached their highest number of days with these short spikes occurring for the first time in the association's 20 years producing these air quality reports. This includes cities in California, Alaska, Utah, Montana, and Washington, many of which are grappling with increasingly intense and destructive wildfires.

Advertisement

Many cities — in California, as well as West Virginia, Alaska, Ohio, and Oregon — have also experienced worsened year-long particle pollution.

The report's findings come in stark contrast to repeated claims made by Trump, going back as far as his [campaign trail](#) in 2015 when he said, "You want to have clean air. You want to have clean water. That's very important to me, and I've won many environmental awards. I am not a believer in climate change."

Then after being elected, he pledged in his 2017 State of the Union address to "promote clean air and water."

This mantra continued into 2018. That September, he defended his decision to have the United States withdraw from the Paris climate agreement by stating, "we have the cleanest air now in the world. We have the cleanest water. Remember this. I'm an environmentalist. I want crystal-clean water. I want crystal-clean air."

He echoed this refrain in a November interview with the Washington Post, during which he said, "You look at our air and our water, and it's right now at a record clean."

Black and Latinx Americans suffer more from dirty air but the EPA is charging ahead with rollbacks

These claims, however, run contrary to the anti-environment, deregulatory agenda pursued so far by the Trump administration.

"Unfortunately, this Administration has focused on steps to roll back or create loopholes in core healthy air protections put in place to comply with the Clean Air Act," the American Lung Association report states. "Not only has this Administration targeted specific Clean Air Act safeguards for rollbacks, it has also sought to weaken the scientific review and undermine the basis for current and future protections."

Among the rollbacks highlighted by the report is the repeal of the Clean Power Plan, which sought to reduce carbon emissions from coal plants, removing limits on methane emissions from oil and gas operations, and attempts to weaken the Clean Air Act.

This includes targeting mercury and air toxics standards, or MATS — a 2011 set of federal rules under the Clean Air Act designed to reign in the pollution from plants that burn coal and oil. Under Administrator Andrew Wheeler, the Environmental Protection Agency (EPA) [has sought to limit the use of public health data](#) in regulating power plant emissions, a move that essentially guts MATS. Meanwhile, the EPA has also warred with California over the state's stricter vehicle emissions standards.

Trump has also repeatedly sought to cut the EPA's budget. Under the 2020 federal budget proposed by the president earlier this year, the EPA would take a 31 percent cut in funding, with pollution prevention programs [among those slated for elimination](#).

In its conclusions, the American Lung Association emphasized that "more must be done to address climate change" and that the Clean Air Act "must remain intact and enforced." However, it warned that this might not be likely due to actions taken by this administration. As a result, decades of improvements in air quality, it states, is now "threatened."

Biofuel

Argus Media

EPA's biofuel mea culpa

<https://www.argusmedia.com/en/blog/2015/february/24/epas-biofuel-mea-culpa>

Elliott Blackburn

Posted: April 24, 2019

The very program that made biofuels commonplace in the US transportation fuel supply has ethanol producers looking abroad.

Years of delays in the nearly decade-old Renewable Fuel Standard — which mandates minimum volumes of ethanol, biodiesel and advanced biofuels that industry must produce — have undermined confidence in the program. The US Environmental Protection Agency, which oversees the program, failed to produce blending requirements for 2014, missed a November deadline for 2015 mandates, and is now saying it will catch up on 2014, 2015 and 2016 deadlines by June. The EPA's track record is so bad that Chris Grundler, director of the EPA office of transportation and air quality, offered a frank apology last week to the Renewable Fuel Association's National Ethanol Conference in Grapevine, Texas.

"I know words are cheap but in this case they are sincere, because I know and I get there are consequences when government fails to act," Grundler told the conference.

The ethanol industry has ceded no ground to opponents in its defense of the RFS, but it may be losing confidence in the administration's appetite for the program. Low crude prices not only reduce the profitability of blending ethanol into conventional fuels — they erode the urgency for lawmakers to tinker with new ways to reduce prices in the fuel supply. Corn producers already face low prices this year, based on projections by the US Department of Agriculture, so ethanol producers are trying to show they can grow markets for their product without federal mandates.

But time may be growing short. In 2019 a tax credit that gives automakers incentive to produce flex fuel vehicles that can use up to 83pc ethanol blends is expiring. This gives sellers a limited amount of time to build up consumer demand in the US.

Retail chains and local regulators are being encouraged to make higher-ethanol fuel blends more widely available, while the expected retirement of thousands of fuel dispensers across the US over the next few years creates an opportunity for many more fuel stations to offer higher-ethanol blends when they replace the equipment.

And ethanol producers are working to increase exports to new overseas markets. Canada, Brazil and the European Union are all major markets today, but producers see new opportunities in Asia, where US production costs outperform local sources.

"The bottom line is that there's a lot of potential for [higher ethanol blended fuel] E85," John Eichberger, director of the Fuels Institute, told attendees at the Grapevine conference. "But there's got to be a lot of work."

Bloomberg Environment

Biostimulant Makers Working to Smooth Regulatory Path to Farmers

<https://news.bloombergenvironment.com/environment-and-energy/untitled-0000016a5091dde5a3ee51bd67160002>

Pat Rizzuto

Posted: 5:39pm, April 25, 2019

- Biostimulant manufacturers face May deadlines for EPA, USDA actions on their products
- Uniform national label, clarity on label claims sought

Biostimulant manufacturers are meeting with federal regulators and each other as they prepare comments on two activities that could create a clearer regulatory path to market for their products, Lallemand Plant Care's regulatory manager said April 24.

By early May, companies will provide a U.S. Department of Agriculture Workgroup draft recommendations on a definition of biostimulants, a uniform label that could be used in all U.S. states, and other issues, Amy Plato Roberts from Lallemand said. That privately held Canadian company produces bacteria, yeast, and other products that stimulate the growth of plants and protect them without pesticides.

Hundreds of small, medium, and large companies, including BASF Corp., Bayer AGm, Corteva Agriscience, the agriculture division of DowDuPont, and FMC Corp., are making biostimulants or researching them with the hopes of getting into the market once their regulatory path becomes clear, Keith Jones, executive director of the Biological Products Industry Alliance, said.

The USDA workgroup, established by the 2018 Farm Bill, will propose regulatory approaches to Congress and the president to ensure biostimulants are available to farmers.

The workgroup will begin holding its meetings in May, Roberts said during a webinar organized by Bergeson & Campbell, PC., a Washington-based law firm.

Industry groups also are preparing comments, due May 28, on draft biostimulants guidance the Environmental Protection Agency issued March 25, Roberts said. EPA's guidance describes the types of label claims companies could make that would ensure biostimulants aren't regulated as pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

\$2.2 Billion and Growing

Biostimulants are neither fertilizers nor pesticides, Roberts said.

Instead, biostimulants use the tools of nature, such as microbes, bacteria, and fungi, to boost the nutrients plants can obtain from soil, improve crop yields, and help plants deal with environmental stressors such as extreme temperatures and droughts.

Analysts estimate the global biostimulants market was \$2.2 billion in 2017, Jones told Bloomberg Environment. That global market is estimated to increase to \$3 billion by 2021, he said.

The European Union made that path clearer in March when it updated its fertilizer law with provisions regulating biostimulants, he said.

Uniform Labels

The focus is now on the U.S., Jones and Roberts said.

Among their many challenges, manufacturers can't describe their products as biostimulants, they said.

One state might require a company to add a nutrient to its biostimulant and sell it as a fertilizer, Jones said. Another state might want it registered as a pesticide through EPA, he said.

Nor can a company label its product consistently across the U.S., they said. Different registration systems exist in different states, and the claims companies can make vary, they said.

Being allowed to use "one label for all states," is among the industry's goals, Roberts said.

So is clarity on the types of claims manufacturers could make on those labels, she said.

The manufacturers see progress, she said. With the USDA's workgroup being established and EPA's draft guidance issued "states are truly engaged, which is excellent to see," Roberts said.

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Inside EPA

API doubts EPA will grant call to extend E15 comment deadline

<https://insideepa.com/daily-feed/api-doubts-epa-will-grant-call-extend-e15-comment-deadline>

Staff

Posted: April 25, 2019

The American Petroleum Institute (API) is urging EPA to extend by 30 days the April 29 deadline for input on the agency's proposal to allow sales of 15 percent ethanol fuel (E15) year-round and to overhaul the market for biofuel credits, though API doubts EPA will grant the request as it faces political pressure to finalize the plan by June 1.

On a conference call with reporters April 25, API Vice President of Downstream and Industry Operations Frank Macchiarola noted that the group [wrote to EPA April 18](#) asking the agency to lengthen the original 30-day period for public comment by another 30 days. "In past rulemakings of this magnitude, it has been customary to allow a 60-day comment period. We believe it is more important for the EPA to receive quality feedback enabled through a 60-day comment period rather than a shorter rushed process," the letter said.

But Macchiarola told reporters, "We are not confident we are going to receive an extension" of the deadline for the proposal published in the *Federal Register* March 21, though API continues to "oppose the rule in its entirety."

The group believes that allowing E15 sales in the summer months, from June 1 through September 15, would merely worsen the fundamental structural problems of the RFS, created by the “blend wall” imposed by vehicle and infrastructure constraints that limit uptake of more ethanol in motor fuel.

API further believes that the shakeup of the market for renewable fuel standard (RFS) compliance credits also floated in the proposal is unwarranted and could harm the functioning of the market.

However, summer sales of E15 are seen as vital by the biofuels sector, and President Donald Trump has directed EPA to issue the waiver from federal fuel volatility rules necessary for year-round E15. In order to allow gas stations to sell the fuel this summer, EPA must finalize its proposal by June 1.

This puts EPA on a very tight schedule to complete the rule, leading to accusations from critics that the agency is forcing it through too fast, ignoring voices of caution both inside and outside the administration.

Many in the oil sector oppose expanded E15 sales, but the refining industry is divided on the merits of the proposal’s overhaul of RFS compliance credits, known as renewable identification numbers (RINs). EPA proposes to limit which entities can hold RINs and for how long, in order to combat possible market manipulation - although the agency in its proposal concedes it has no evidence of such manipulation.

The RIN reform has long been a goal of “merchant” refiners that rely on buying RINs from others, but is opposed by large, integrated oil companies that generate their own RINs by blending biofuel. “The proposed changes to the RIN program could have negative consequences without achieving the intended benefits,” API says in its April 18 letter.

A source representing merchant refiners says, “It is important the Administration finalize a rule with the right market reforms that limit speculation and manipulation without creating any unintended consequences for RFS obligated parties.”

On timing of the rulemaking package, the source notes that biofuels groups want the RIN changes stripped from the rule, in case they delay the approval of the E15 waiver. But the source adds that while “many will say the market reforms provisions are causing additional delays for this expedited timeline, what is really causing potential delays is the legal questions and hoop-jumping that EPA officials are undertaking to try and make the E15 portion of this rule legal -- which remains a significant concern regardless.”

Meanwhile, boating and motorcycle associations on the API conference call outlined arguments made in April 12 joint comments to EPA with other groups, warning of the dangers of misfuelling with E15, which can harm small engines not certified to run on the fuel. The American Motorcyclist Association and the National Marine Manufacturers Association both oppose the E15 proposal, arguing it will lead to more misfuelling of boats, motorcycles and other equipment with small engines.

Ethanol Today: Courts, Courts, and More Courts

<https://www.dtnpf.com/agriculture/web/ag/blogs/ethanol-blog/blog-post/2019/04/25/ethanol-today-courts-courts-courts>

Todd Neeley

Posted: 2:32pm, April 25, 2019

Until the EPA can review the system it uses to determine which small refineries receive waivers to the Renewable Fuels Standard, a biofuels interest group this week asked a federal court to issue an injunction on the agency's ability to approve additional waivers.

Waivers issued during the past two-plus years has, by EPA's own estimate, affected about 2.6 billion gallons in biofuels. It remains a subject of debate as to whether this means all of those gallons were not blended with gasoline. Because the number of biofuels gallons blended in gasoline actually fell for the first time in 20 years, it appears as if the waivers have had an effect.

On Wednesday, the Advanced Biofuels Association asked the U.S. Court of Appeals for the District of Columbia Circuit in Washington, to stop the agency from approving additional waivers.

"Since ABFA filed its petition in May of 2018, 40 small refineries submitted petitions to EPA seeking exemptions from the RFS program for compliance year 2018," the group said in a court motion.

"Administrator (Andrew) Wheeler recently testified that EPA will receive exemption recommendations from the Department of Energy 'any day now' and will issue final exemption decisions quickly 'on a rolling basis.' Absent an injunction, therefore, EPA will issue final decisions on many -- perhaps all -- of the 40 pending petitions based on its unlawful modified criteria before this court can reach a decision on the merits of ABFA's petition after briefing concludes on June 12, 2019."

The ABFA filed a legal challenge last year, attempting to force EPA to reconsider the method used to make waiver determinations.

"Furthermore, ABFA can show that EPA is granting 'extensions' of exemptions to small refineries that did not receive -- and often did not bother to apply for -- exemptions in preceding years," ABFA said in its motion. "EPA is poised to apply its new methodology to the 40 pending petitions, meaning dozens of small refineries will again receive exemptions to which they are not legally entitled."

"For the first time in 40 years, however, the volume of renewable transportation fuel consumed in the U.S. is flat or declining. This reversal was caused by deliberate efforts by respondents, the U.S. Environmental Protection Agency and its Administrator Andrew Wheeler, to dismantle the Clean Air Act's Renewable Fuel Standards Program by unlawfully

exempting, through the application of a new evaluation criteria, dozens of small petroleum refineries from complying with renewable fuel mandates based on dubious claims of 'economic hardship.' EPA's unlawful actions produced a massive transfer of wealth from renewable fuel producers to petroleum refineries that did not previously apply for exemptions, knowing that they did not qualify."

The saga continues.

Speaking of biofuels and legal action, with the public comment period for the E15/Renewable Identification Numbers reform rule ending on Monday, an American Petroleum Institute spokesperson made it official on Thursday: The group will file a legal challenge once the rule is finalized.

"There's no question we're challenging the rule from a legal standpoint," API Vice President of Downstream and Industry Operations Frank Macchiarola said during a call with reporters.

In addition, the API has asked the EPA for a 30-day extension of the public comment period. Though Macchiarola said it is needed to study the effects of the rule that would allow year-round E15 sales, extending the public comment period would make it unlikely the agency could finalize the rule in time for the start of the summer driving season on June 1.

Delay tactic? Seemingly.

Reuters

U.S. biofuel trade group asks judge to halt new EPA small refinery waivers

<https://af.reuters.com/article/commoditiesNews/idAFL1N226186>

Jarrett Renshaw

Posted: April 25, 2019

NEW YORK, April 24 (Reuters) - A U.S. biofuels trade group asked a federal court on Wednesday to stop the Environmental Protection Agency from giving refiners new waivers from the country's biofuels law until the agency reverts to the tougher criteria it used to assess applications before Donald Trump's presidency, according to court papers.

The waivers can exempt small refineries — those with a production capacity of 75,000 barrels per day or less - from the requirements of the Renewable Fuel Standard, which mandates U.S. refiners blend biofuels into the fuel pool or buy compliance credits from those who do.

Trump's EPA has vastly expanded the biofuel waiver program to save the oil industry money, angering Midwest farmers who say the policy destroys demand for corn-based ethanol and other biofuels at a time they are already struggling - putting the administration in the center of a fight between two key constituencies.

“We want to return to normalcy,” Michael McAdams, head of the Advanced Biofuels Association (ABFA), which filed the injunction in the U.S. Court of Appeals in Washington, said in an interview on Wednesday. “My members will continue to suffer irreparable harm unless the EPA changes its ways.”

The U.S. Renewable Fuel Standard is meant to help farmers by requiring refiners to blend certain volumes of biofuels into their fuel each year or purchase credits from those that do. But the RFS also allows small refineries to apply for exemptions to the regulation if they can prove that compliance would cause them financial harm. (Reporting by Jarrett Renshaw in New York Editing by Matthew Lewis)

Chemicals

Chemical Watch

NGOs urge investigation of 'political interference' in IRIS formaldehyde review

<https://chemicalwatch.com/76756/ngos-urge-investigation-of-political-interference-in-iris-formaldehyde-review>

Kelly Franklin

Posted: April 25, 2019

A group of NGOs has called on the US EPA's scientific integrity office to investigate whether political interference led the agency to suspend work on its risk assessment of formaldehyde under the Integrated Risk Information System (IRIS) programme.

In a 16 April letter – submitted by the Union of Concerned Scientists, the Environmental Defense Fund (EDF), the Natural Resources Defense Council (NRDC) and the Environmental Protection Network (EPN) – the NGOs said public documents and information obtained through a Freedom of Information Act (FOIA) request point to "significant and sustained political interference in the risk assessment process" of the widely used substance.

And an investigation is needed "to understand whether the IRIS formaldehyde assessment has been suppressed and set aside by any staff at the agency, or if any other losses of scientific integrity occurred", they wrote to scientific integrity official Francesca Grifo.

The development is the latest in a years-long, and recently intensifying, debate over the programme's review of formaldehyde. Industry groups have long disputed a 2010 draft assessment that linked the substance to leukaemia, while concern has grown about efforts to suppress publication of an updated version.

The issue has come to the forefront in recent months, after formaldehyde was excluded from a December IRIS programme outlook, despite reportedly having been ready to be released for peer review since autumn 2017. The omission was the result of a prioritisation exercise which, as reported in a subsequent Government Accountability Office (GAO) report, saw IRIS officials conduct "a survey of programme and regional offices, asking them to reconfirm their needs for 20 assessments that were in development."

The resulting list of IRIS priorities comprised only 11 substances, and did not include formaldehyde.

But in their letter, the four NGOs have protested that this is at odds with internal agency communications they have obtained through a public records inquiry.

In a November 2017 email, leadership at the EPA's air office told the Office of Research and Development (ORD) that it had a "strong interest in this [IRIS] review and are anxious to see it completed".

"We have consistently identified formaldehyde as a priority," said director Erika Sasser in the correspondence to the ORD's Jennifer Orme-Zavaleta. "We greatly value the rigour of the IRIS programme's unit risk evaluations."

And the NGOs have flagged up concern about what this exchange means in view of the subsequent decision to drop the IRIS assessment: "Since senior EPA staff knew of the air programme's keen interest in the status of the formaldehyde assessment, its exclusion from the list of prioritised chemicals appears to be political," they wrote.

The substance also appears to be of interest to the EPA's Office of Chemical Safety and Pollution Prevention, given that the agency named the substance a candidate for designation as high priority under TSCA last month.

EPA Administrator Andrew Wheeler recently confirmed that there are no plans to complete the IRIS assessment, but rather it will be reviewed under TSCA.

"We decided that it was more important to go ahead and put formaldehyde through the TSCA programme because, at the end of the day, we can regulate formaldehyde under TSCA," he told Congress earlier this month.

Nevertheless, the NGOs' letter calls on the scientific integrity office to investigate "why the scientific opinions of staff at OAR [Office of Air and Radiation] were not considered when prioritising IRIS assessments to release."

"Permitting the suppression of this study to persist unchecked normalises political interference at the agency and sends a message to career staff that their knowledge and expertise is not valued," they added.

The EPA's scientific integrity policy was adopted in February 2012. It applies to all agency employees and "provides a framework to promote scientific and ethical standards and to create a proactive culture to support them."

The EPA did not respond to a request for comment by the deadline.

Chemistry World

New US asbestos rule criticized as outright ban on the carcinogen ditched

<https://www.chemistryworld.com/news/new-us-asbestos-rule-criticised-as-outright-ban-on-the-carcinogen-ditched/3010422.article>

Rebecca Trager

Posted: April 25, 2019

The US Environmental Protection Agency (EPA) is under fire for a new policy that, rather than banning asbestos outright, requires that manufacturers notify the agency and seek its approval before resuming use of the known carcinogen.

The EPA's final significant new use rule, issued on 17 April, mandates that companies obtain approval in order to domestically manufacture or import specific types of products containing asbestos. The EPA says its goal is to ensure that asbestos products no longer on the market cannot return to commerce without the agency evaluating them and putting in place any necessary restrictions or prohibitions on use. Environmental groups have said that the new policy is inadequate, however.

'This new rule makes it more difficult for industry to resume some abandoned uses of asbestos, but that is a half-step at best,' stated the Environmental Working Group's legislative attorney, Melanie Benesh. She faulted EPA chief Andrew Wheeler for not using the agency's authority under the updated Toxic Substances Control Act (TSCA) to simply prohibit all uses of asbestos.

Some key lawmakers on Capitol Hill also denounced the EPA's latest action. 'Just last week, Administrator Wheeler sat before my committee and committed to an outright ban of ongoing uses of asbestos,' said Representative Frank Pallone, who chairs the House energy and commerce committee. 'Today's rule is a complete betrayal of that commitment,' he continued. 'It does nothing to restrict ongoing uses of asbestos; instead it provides a pathway to market for uses that had previously been phased out, such as in floor tiles and insulation.'

The EPA argues that the new rule strengthens its ability to 'rigorously review an expansive list of asbestos products' that are no longer on the market before they could be sold again in the US. 'Prior to this new rule, the EPA did not have the ability to prevent or restrict certain asbestos products from being reintroduced into the market,' Wheeler said in a statement.

The American Chemistry Council (ACC), a chemical industry trade group, endorsed the EPA's new rule. The ACC said the new rule will strengthen the agency's ability to regulate asbestos by requiring manufacturers and importers to provide notification of potential new uses of asbestos, and then requiring that the EPA subject those proposed uses to a 'rigorous safety review, regulation and restrictions'.

Detroit Free Press

PFAS contamination is Michigan's biggest environmental crisis in 40 years

<https://www.freep.com/in-depth/news/local/michigan/2019/04/25/pfas-contamination-michigan-crisis/3365301002/>

Keith Matheny

Posted: 8:00am, April 25, 2019

Sandy Wynn-Stelt knows it's too late for herself. The chemicals she drank for perhaps 25 years out of her tap — the ones that now poison her blood at levels 750 times the average American's — will remain inside her body.

They may naturally work their way out over years, toxicologists say. But no one can tell Wynn-Stelt definitively what her prolonged exposure to massive levels of per- and polyfluoroalkyl substances — PFAS, the emerging contaminant causing a rising crisis across Michigan and the country — will mean for her future health.

PFAS contamination is Michigan's biggest environmental crisis in 40 years

PFAS contamination is not a Michigan problem but also a nationwide problem.

DETROIT FREE PRESS

The U.S. Environmental Protection Agency's health advisory level in drinking water for two of the most common PFAS compounds, known as PFOS and PFOA, is 70 parts per trillion. The levels in Wynn-Stelt's drinking water tested as high as 76,000 parts per trillion.

Michigan may have more than 11,000 sites contaminated with these once-common chemicals, now linked to cancer and a host of other ailments. Regulators have identified 46 sites statewide with levels above the EPA's health limit in groundwater.

"It's kind of this fatalistic view when you realize you've drank so much of this, and you've got so much in you," said Wynn-Stelt, 59.

PFAS in Michigan: What to know about contaminant, exposure risk, drinking water concerns

■

Show caption

Sandy Wynn-Stelt of Belmont stands in her home on Monday, March 11, 2019. Wynn-Stelt lives across the street from the former House Street landfill, where...RYAN GARZA, DETROIT FREE PRESS

She learned in 2017 that her drinking water well was tainted by a plume of PFAS groundwater contamination that came from a landfill across the street from her house in the Kent County community of Belmont, where Wolverine Worldwide, the longtime shoe and leather products maker in neighboring Rockford, for years dumped waste sludge from its tannery.

Wolverine made popular Hush Puppies shoes treated with ScotchGard for water resistance. That water resistance came from PFAS compounds.

"I don't know if I worry about my health so much at this point because there's nothing I can do about it," Wynn-Stelt said.

"I'm trying to put my time and energy into making sure this doesn't happen again."

■

Show caption

PFAS foam floats along Van Etten Creek after being dumped from a pipe of water treated at a granular activated carbon GAC plant from the...RYAN GARZA, DETROIT FREE PRESS

PFAS contamination is Michigan's most widespread, serious environmental crisis since the 1973 PBB disaster, when polybrominated biphenyl fire retardant was accidentally mixed with cattle feed at the Velsicol Chemical factory in St. Louis, Michigan. More than 500 contaminated Michigan farms were quarantined, and 30,000 cattle, 4,500 pigs, 1,500 sheep, and 1.5 million chickens were destroyed. Approximately 85% of the Michigan public received some exposure to the contaminant, tied to cancer, thyroid and hormonal disorders. Studies on long-term effects are still continuing.

There are thousands of PFAS chemicals, many of them little-understood byproducts. Though the chemicals were distributed, purposefully and inadvertently, by 3M, DuPont and other chemical companies for generations, virtually nothing is known about most of them. But PFOS and PFOA — the compounds most frequently cited by regulators because they have received more scrutiny — have been linked to cancer; conditions affecting the liver, thyroid and

pancreas; ulcerative colitis; hormone and immune system interference; high cholesterol; pre-eclampsia in pregnant women, and negative effects on growth, learning and behavior in infants and children.

What is PFAS? An overview of 'The Forever Chemical'

The chemical contaminant PFAs is emerging as a big problem in Michigan.

KEITH MATHENY, DETROIT FREE PRESS

From the late 1940s to the 2000s, PFAS was the 3M Corporation's wonder product. The compounds made by the Minnesota-based company repelled grease and water, so they could be used for a host of processes and consumer products, from wrapping paper for hamburgers to microwave popcorn bags, from nonstick cookware to carpet and upholstery stain guards, from waterproofing shoes and clothes to use in chrome plating industries and even dental floss.

The qualities that made it so useful, however, also make it virtually impossible to break down in nature — giving the compounds the ominous nickname "the forever chemical." PFAS can now be found in the blood of nearly 99% of Americans. It has even been found in polar bears in the Arctic Circle, as the chemicals have worked their way up the food chain from fish and seals.

The ramifications from PFAS's widespread use, its persistence and its harm continue to reverberate in Michigan and elsewhere:

- Some 46 Michigan locations have PFAS compounds in groundwater that exceed the EPA's 70 parts-per-trillion health advisory level. The Michigan Department of Environmental Quality (now known as the Department of Environment, Great Lakes and Energy) has estimated PFAS could be found at more than 11,300 sites in Michigan — fire stations, municipal airports, military sites, refineries and bulk petroleum stations, wastewater treatment plants, old landfills, and various industrial sites.
- Seventeen rivers, lakes, streams and ponds throughout Michigan have "do not eat" fish advisories, or limitations on consumption of fish, because of PFOS contamination, including Saginaw Bay, Lake St. Clair and portions of the Au Sable, Huron, Flint, Saginaw and St. Joseph rivers.
- Michigan last year became the first state to issue a PFAS-related, do not eat advisory for deer — in a 5-mile radius of Clark's Marsh, near the shuttered Wurtsmith Air Force Base in Oscoda, after a deer there was found with elevated PFOS levels in its blood.
- Anecdotal evidence of a chilling effect on hunting and fishing in affected locations could harm a hunting and fishing economy in Michigan that the nonprofit Michigan United Conservation Clubs, in a report released in January, put at \$11.2 billion and 171,000 jobs each year.
- Homeowners are worried the emerging contaminants are damaging their property values and discouraging new, local businesses. Iosco County's largest employer is in limbo on plans to expand its operations at the Oscoda-Wurtsmith Airport because of the ongoing contamination concern.
- PFOS and PFOA were largely phased out of U.S. production by 2015, under EPA pressure. But the chemicals have never been outright banned, and their production shifted to China and other countries, so the contaminants continue to pollute the globe.
- Two of the first PFAS-like compounds the chemical industry has begun making and using to replace PFOS and PFOA, called GenX and PFBS, have their own health and environmental concerns. The EPA in November announced that toxicology studies show human livers are sensitive to GenX chemicals, and the kidney and thyroid are sensitive to PFBS. The state of North Carolina in 2017 discovered GenX now pollutes the Cape Fear River and surrounding groundwater, a significant source of public drinking water. State regulators tie the pollutant to a chemical plant in Fayetteville owned by Chemours, a spinoff company from DuPont, which manufactured Teflon containing PFAS compounds for decades.
- Having known at least since the 1990s of health and environmental concerns associated with PFAS, the EPA still has only set an advisory limit — with no enforcement power — for two types of PFAS compounds, out of thousands. Michigan is following the EPA number, though a science advisory panel convened by former Gov. Rick Snyder concluded last December that the number "may not provide a sufficient margin of safety" for public

health. Gov. Gretchen Whitmer has directed that Michigan develop its own, enforceable PFAS drinking water standards by the end of this year.

- Other states are more restrictive. California and New Jersey both have groundwater advisory levels set at 13 parts per trillion for PFOS and 14 parts per trillion for PFOA, and New Jersey is considering making its an enforceable limit, one by which regulators can direct a polluter to clean up until the pollution no longer exceeds the standard. Vermont sets a limit of up to 20 parts per trillion total combined for PFOS, PFOA and three other PFAS compounds. Most U.S. states, however, still have no PFAS water contamination standard in the works.

It's not just Michigan's problem. Products containing PFAS were used almost everywhere. The Pentagon last year identified 401 military sites across the U.S. where there are known or suspected releases of PFOS and PFOA through the use of firefighting foam. On at least 160 of those sites, the PFAS contamination in groundwater exceeds the EPA's health advisory level.

An analysis by the nonprofit Environmental Working Group, using EPA data, last year found that up to 1,500 public drinking water systems nationwide, serving 110 million Americans, contain PFOA, PFOS and other PFAS compounds.

"The whole PFAS issue kind of shows the failure of the entire environmental protection effort that's going on in this nation," said Robert Delaney, a DEQ remediation project manager at Wurtsmith, where PFAS contamination first rose into Michigan's consciousness. Delaney, the first official in Michigan to sound an alarm on the pervasiveness and danger of PFAS contamination statewide, emphasized he was speaking for himself, and not the DEQ.

"Industry understood that these chemicals were toxic maybe 40 years ago. And yet today, we're having a hard time getting the federal government to address even two of the maybe 3,000 to 5,000 PFAS chemicals that are out there."

Wynn-Stelt moved to her House Street home in Belmont with her husband, Joel, in 1992, attracted to the surrounding forests and Christmas tree farm on the other side of the street, providing their front-window view. No one told the couple that the trees were planted over the former sludge dump from Wolverine Worldwide's leather tannery.

Show caption

Left: Sandy Wynn-Stelt of Belmont stands in her home on Monday, March 11, 2019. The DEQ informed her in 2017 that her well water had...RYAN GARZA, DETROIT FREE PRESS

Joel died on March 26, 2016, at age 61 of liver cancer, only a few weeks after being diagnosed. Wynn-Stelt says she has no idea whether the exposure to PFAS contamination caused her husband's cancer.

"I will never know, and that is part of what keeps you up," she said. "It makes it really hard to grieve when you have all of these unknown questions kind of going through your head."

In 1938, Dr. Roy J. Plunkett, working at the DuPont Company's Jackson Laboratory in Deepwater, New Jersey, discovers nonstick PFAS chemicals by accident during a failed experiment with refrigerants. The white, waxy material was the slipperiest substance ever found, and heat-resistant. Initially used in military and industrial applications, within 10 years, DuPont was producing about 2 million pounds of PFAS compounds per year, as it exploded into a variety of consumer uses. It was produced from PFAS chemicals provided by the Minnesota Mining and Manufacturing Co., or 3M.

A statewide problem in Michigan

Major centers for Michigan's PFAS crisis are on two different sides of the Lower Peninsula: Oscoda, near Lake Huron, where the contaminant first emerged at the former Wurtsmith Air Force Base and is now affecting ground and surface water in the surrounding community; and in west Michigan, where more than 1,500 private wells are contaminated in northern Kent County in and around Belmont and Rockford from PFAS associated with Wolverine Worldwide's leather operations. About an hour south, in Parchment in Kalamazoo County, a paper mill's landfill leached PFAS compounds into the community's drinking water supply.

But they are not the only PFAS problem sites in Michigan. The 46 sites at which groundwater contamination exceeds the EPA's 70 parts-per-trillion health advisory limit for PFOS and PFOA cover much of Michigan:

- In Grand Haven, Robinson Elementary School was quickly switched to bottled water last October after its well water tested for PFOS and PFOA at levels above the EPA health advisory mark. The source of the contamination there is unknown.
- Sites in the Upper Peninsula near Marquette and Escanaba have high levels of PFAS in soils and groundwater, related to operations at the now-closed K.I. Sawyer Air Force Base.
- Around Grayling and Alpena, military-related facilities that used PFAS-containing firefighting foam are also contaminated.
- In Grand Traverse County's Blair Township, the use of firefighting foam on a 1995 tire fire — one fire, more than 20 years ago — has left groundwater with excessive levels of PFAS compounds.
- In Cass County's Howard Township, a 2016 tanker truck fire in which the foam was used has also left PFAS contamination in water and soil.
- The Clinton River and Lake St. Clair near the Selfridge Air National Guard Base in Monroe County's Harrison Township is contaminated because of firefighting foam use over years on the base.

The State of Michigan, in addition to testing public water systems, surface waters and fish for PFAS exposure statewide, is also beginning to assess just how exposed its citizens have become in the west Michigan hot spots.

Federal, state and local health officials are collaborating to assess the exposure levels of those with drinking water tainted from Wolverine Worldwide's sludge disposal sites.

Affected residents are being contacted and asked to participate in clinics, where they provide demographic data and a blood sample. Health officials are hoping to get 400 samples of blood from two resident groups: Those whose water tested for PFAS compounds above 70 parts per trillion, and those who had some PFAS in their water, but below 70 parts per trillion. After exposures are characterized, further studies may be conducted to examine how health issues potentially correlate with PFAS blood or water levels.

Oscoda's dilemma: To complain or not

In Oscoda, the community faces a tough choice, Oscoda Township supervisor Aaron Weed said.

The Air Force is not effectively acting to curtail the PFAS contamination that is emanating from the former base, where it was used in firefighting foam over decades. The contamination is getting to residential wells, Van Etten Lake and the Au Sable River, Weed said.

Township residents need to call attention to the Air Force's inaction, he said. But Oscoda is heavily reliant on summer tourism, cottage rentals, hunting and fishing. And every bit that the community is tied to a contamination problem potentially harms that economic driver.

"This is the problem we run into," Weed said. "We have a lot of people who are affected, who are upset about it, but don't want to be public about it."

"We take a hit," said Arnie Leriche, a co-founder of Need Our Water, or NOW, a grassroots community group engaged on the PFAS problem at Wurtsmith. "We're a resort community, a low-density population, and we take a hit for every single word in the press (about PFAS) ...

"(But) it's good that it's there. It needs to be portrayed that this is a statewide issue, and the state government, the past eight years, (hasn't wanted) to send that message out."

Robert Tasior is vice chairman of the township planning commission and a member of the Wurtsmith Restoration Advisory Board, or RAB, a body that meets quarterly, giving community members a chance to meet with the Air Force, the DEQ, the health department and others on where the cleanup stands.

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Robert A. Tasior stands next to water from the Van Etten Creek in Oscoda on Wednesday, March 13, 2019 near the dam that feeds to Van Etten Lake. RYAN GARZA, DETROIT FREE PRESS

Tasior said his wife, Devon, a real estate agent in the community, has lost sales related to the ongoing PFAS situation.

"One couple was looking at half-million-dollar homes on Lake Huron, but they decided because of the contamination that they were going to look down the road, farther away from Oscoda," he said.

"She's lost a couple of sales on Van Etten Lake because of the contamination — she has had people say it's because of the contamination."

Kalitta Air, at the Oscoda-Wurtsmith Airport, is the largest employer in Iosco County. The company ships cargo by air and also provides jet engine maintenance for others, including Boeing and General Electric.

"They've got 1,400 employees here, air mechanics who make pretty good money, right here on the (former) base," Leriche said.

Already boasting 240,000 square feet of hangar and engine shop space, company officials are interested in expanding by one or two additional hangars, expecting to create 150 additional jobs. But the company wants protection from the U.S. government against liability from the existing PFAS contamination, and the Air Force has refused, Leriche said.

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Show caption

Piles of dirt dug up on the former Wurtsmith Air Force Base in Oscoda that has to remain on the property is seen by a... RYAN GARZA, DETROIT FREE PRESS

"They don't own the land — the township redevelopment authority owns the land; it was given to them by the Air Force," he said. "The Air Force has a covenant on the deed. That covenant allows the Air Force to do remediation, to do sampling, to even hold up a project until they clean up contamination."

But that cleanup is moving painfully slowly.

"Delay is hurting our businesses," Leriche said.

'We know we've got a toxic foam'

The DEQ last October issued its second Notice of Violation to the Air Force for its lack of response to the PFAS contamination near Wurtsmith.

"The slow response by the Air Force to the Wurtsmith contamination is having an increasingly negative impact on the people, wildlife, and environment in Oscoda," Carol Isaacs, then-director of the Michigan PFAS Action Response Team, a group of state agencies working together on PFAS issues, said at the time.

The DEQ has sought to require the Air Force to comply with the state's regulatory limit for PFOS where groundwater vents to surface waters, 12 parts per trillion, to help address the continued problem of foam on streams, rivers and lakes near Wurtsmith, including into Lake Huron. Foam samples in the area have tested at more than 110,000 parts per trillion for combined PFOS and PFOA.

The Air Force, however, has declined, stating it is not required to comply with the state's rules, only CERCLA, the federal Superfund law. The DEQ believes the area around the base perimeter needs 18 granular activated carbon filtration plants to effectively contain and begin to clean up the contamination affecting surface waters; the Air Force has installed two.

"Those (filtration) plants only cover a small portion of the plume — there are still huge swaths that are not being taken care of," Weed said, adding he has met with "absolute resistance" from the Air Force, and that "it looks like they are trying to just avoid responsibility, even if they have to get ridiculous about it."

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Show caption

Left: Oscoda Township Supervisor Aaron Weed talks about the PFAS contamination stemming from the former Wurtsmith Air Force Base in Oscoda on Wednesday, March 13,...RYAN GARZA, DETROIT FREE PRESS

A recent revelation might shed light on why that's happening. [The New York Times on March 14](#) wrote that the Pentagon, in a report to Congress last year, expressed support for a PFAS cleanup level at its military facilities of 380 parts per trillion, or more than five times the EPA health advisory level for drinking water. The Defense Department has identified 401 military facilities nationwide where PFAS compounds were used, and the drinking water or groundwater of at least 90 of those sites is contaminated with PFAS.

Said Weed, "I've told the Air Force, 'Get the money to fix this problem at Wurtsmith,' And they've said, 'Well, if we do that, then we have to get money for all the 40 other BRAC bases (Base Realignment and Closure, Air Force bases closed at the end of the Cold War).'

"And I said, 'What's the problem with that? You don't have to treat us special — treat them all. Take care of the problem.' "

Meanwhile, recreational activities are being affected by PFAS fish advisories.

Gene Kirvan is a charter captain in Oscoda, one of the few who offer year-round charters on both nearby Lake Huron and the Au Sable River. The DEQ issued a "do not eat the fish" advisory for Clark's Marsh and the eastern Au Sable River for resident, non-migratory fish as far back as 2012, after testing near the Wurtsmith base found astronomical levels of PFAS in some fish. That hurt Kirvan's business, he said.

"It was a bit of a shell shock," he said. "When a lot of people saw the signage, they didn't quite understand what species were specified, what area was specified. Clarification would have helped soften some of the bomb blast."

After educating potential charter-takers that prized migratory fish caught out of the Au Sable — walleye, rainbow trout, steelhead, and salmon — aren't affected by PFAS restrictions, "they are fine," Kirvan has found.

While sensitive to the impact fish advisories can have on a business like his, Kirvan questions why regulators haven't yet done more testing of fish — and more informing of anglers — on Van Etten Lake, just outside Wurtsmith.

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Show caption

A person canoe's along Van Etten Creek in Oscoda Township on Wednesday, March 13, 2019 as a storm pipe pumps water treated at a granular...RYAN GARZA, DETROIT FREE PRESS

"We know Van Etten Lake is another hot spot" for PFAS, he said.

"We know we've got a toxic surfactant foam out on the lake. We know that foam is hazardous to humans. However, we don't see any warnings posted, nothing to warn the consumer."

DEQ spokesman Scott Dean said new "Eat Safe Fish" guidelines for fish in Van Etten Lake were updated and distributed last year, factoring in the results of earlier testing of fish in the lake for mercury and PFOS.

Air Force Secretary Heather Wilson, in a March 3 letter responding to inquiries by U.S. Sen. Gary Peters, D-Michigan, said, "The situation at Wurtsmith is complex. While solutions do not come quickly under the CERCLA (Superfund) process, the Air Force is committed to working with Michigan to find effective solutions within our authorities."

In a study published in 2004 in the peer-reviewed Archives of Environmental Contamination and Toxicology, researchers examined whether PFAS compounds could be found in fish and animals in and around the Great Lakes. The study found PFOS in zebra mussels and small crustaceans called amphipods at levels 1,000 times greater than the waters surrounding them, indicating the chemical builds up and is stored in the organisms. PFAS compounds were found in every fish tested: round gobies and smallmouth bass, in the livers of chinook salmon taken on the Grand River, in the livers of lake whitefish from Thunder Bay in northern Lake Huron, in brown trout eggs from Lake Superior. It was found in the livers of mink and green frogs from Kalamazoo and in the livers of seven dead bald eagles collected at various locations in the Upper Peninsula. "Concentrations of PFOS were the greatest in mink and bald eagles," the study found.

Why PFAS stayed on the market

The U.S. approach to chemical regulation has led to a thriving, profitable, job-creating industry. But there are trade-offs.

"The fallout of having less restrictive regulations on what we produce is that we're constantly performing an uncontrolled experiment," said Matthew Simcik, an associate professor of environmental chemistry in the University of Minnesota School of Public Health.

"We're constantly putting these chemicals out there, people are constantly getting exposed, and we're always playing catch-up on what are the effects."

Congress in 1976 passed the Toxic Substances Control Act, ostensibly to regulate potentially harmful or environmentally damaging chemicals before they came to market. But it never worked as advertised, and, under chemical industry pressure, it grandfathered in, without examination, 62,000 chemicals already in use at the time it was enacted, including PFAS compounds.

"What happens in the U.S. is we produce a chemical, make a bunch of money off it, and then somebody will realize something about it is bad," Simcik said

PFAS contamination in Michigan

It's different in the European Union. Under their chemical regulations, prior registration is compulsory when a company intends to manufacture or import a ton or more per year of a particular substance. Regulators can limit or ban the production, marketing or use of certain substances if they are deemed to pose an unacceptable risk to health or the environment.

The first substantive revision to the Toxic Substances Control Act in 40 years hasn't alleviated critics' concerns.

A 2016 revision to the law provided a process by which to assess new chemicals for safety before their widespread distribution. But within a year, the EPA, which was responsible for the evaluation, had a backlog of more than 600 new chemicals awaiting review, until President Donald Trump's then-EPA Administrator Scott Pruitt announced the elimination of the backlog in August 2017. The chemical industry applauded the announcement, while some environmentalists worried the process was shifting to a priority of quickly clearing chemicals for market rather than protecting public health and the environment.

Added David Andrews, senior scientist at the nonprofit, Washington-based Environmental Working Group, "The whole system for regulating drinking water contaminants is completely broken."

The process of regulation is hard to navigate by design, he said.

"Corporations, not just on PFAS but other chemicals as well, would like to see no changes ever in the regulatory requirements," Andrews said.

"There's an ever-increasing body of science on how widespread these PFAS contaminants are, of how big of an impact they are having on human health. Really expedited action on setting a drinking water standard is the lowest bar here."

But most of the U.S. doesn't yet have PFAS on its radar in the way that Michigan and a few other states do, Andrews said.

"We're still really behind the ball on where this contamination is, where it's coming from," he said.

"Nationally, there's no dedicated effort to identify contaminated sites and clean them up. This issue is much bigger than PFOA and PFOS. There needs to be a national effort to understand and restrict these compounds. The data sets are woefully inadequate."

The EPA responded to Free Press requests for an interview with an emailed statement, touting the PFAS Action Plan the agency released in February. The plan, notably, does not include a timetable by which it will set an enforceable standard for PFOS and PFOA, one that can be used to force cleanups by polluters.

"EPA is continuing to work through the process outlined in the Safe Drinking Water Act to evaluate drinking water standards for PFOA and PFOS," agency officials stated. "This includes a formal process for public input and engagement with stakeholders and scientific advisors in order to ensure scientific integrity and transparency. We are also gathering and evaluating information to determine if regulation under the Safe Drinking Water Act is appropriate for other chemicals in the PFAS family."

Researchers in a study published in the peer-reviewed Journal of Occupational Medicine in September 1993 examined the mortality of employees at a production plant making PFAS compounds. Among their findings: "Ten years of employment

in exposed jobs was associated with a 3.3-fold increase in prostate cancer mortality compared to no employment in PFOA production."

3M, in a voluntary agreement with the EPA in 2000, began a phaseout of its manufacture and use of PFOS and PFOA. But it sold the rights to make PFOA to DuPont, which used it in its Teflon product lines. DuPont would continue to use the product until 2015.

Parchment's tainted water supply

In Parchment, the PFAS contamination problem isn't tied to individual wells, but the municipal drinking water supply for the entire city, more than 3,100 people in the Kalamazoo County community and neighboring Cooper Township. It's the only city in the DEQ's review of more than 1,380 public water systems with PFAS levels above the EPA 70 parts per trillion benchmark, testing as high as 1,500 parts per trillion for combined PFOS and PFOA last July.



A Parchment history sign next to the Kalamazoo River in Parchment, Wednesday, Feb. 6, 2019. JUNFU HAN, DETROIT FREE PRESS

The city's name comes from the paper mill around which the community was built in 1909. The mill operated under varying names over the years, ultimately landing with paper products giant Georgia-Pacific. By the 1990s, 3M-made PFAS compounds were used at the mill to create products including grease-resistant food wrappers for hamburgers and other sandwiches. The mill disposed of its wastes in its own landfill near the site.

In April 2002, Georgia-Pacific entered a consent order with the DEQ, setting forth Georgia-Pacific's responsibilities in closing the mill's landfill. The DEQ noted that "[n]ot closing the landfill could result in contamination continuing to emanate into the Kalamazoo River."

That same year, DEQ found that Parchment's well field was "highly susceptible to potential contaminants." PFAS contamination was confirmed in Parchment's water last July.



Parchment resident David Dykehouse near the water tower at the Kindleberger Park in Parchment, Wednesday, Feb. 6, 2019. JUNFU HAN, DETROIT FREE PRESS

With the exception of a stint in the military, David Dykehouse has lived his entire life in Parchment, on the same street, Parchmount Avenue.

The news of the drinking water contamination "instantly made my stomach upset, to think that not only myself, but my wife and daughter" were exposed for an unknown period of time, he said.

Then Dykehouse started thinking about his family's health history. He has elevated cholesterol levels; his wife has a thyroid condition that "is off the charts in comparison to a normal thyroid issue," he said. Both conditions have been tied to exposures of PFOS and PFOA.

Both Dykehouse's maternal and paternal grandmothers died of cancer on Parchmount Avenue, as did a grandfather. His aunt died of throat cancer in the same neighborhood at age 48.

"You can't help but wonder if the water had something to do with it," he said.

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Dykehouse has signed on to class-action litigation against 3M and Georgia-Pacific.

"I've been here all this time, and kept in the dark about it," he said. "I think it's time people started knowing.

"I hope we get to the bottom of how this came about, and we fix it for future generations."

Nicholas Coulson, Dykehouse's attorney, said Georgia-Pacific is named as a defendant because it was "the entity that was responsible, pursuant to an agreement with MDEQ, for closing the landfill in a safe way." But the reasons the Parchment residents in the class-action suit have named 3M as a defendant go far deeper.

"All in the name of profit, they continued to suppress and actively make sure that no one found out how dangerous these chemicals were, and what impacts they had on animals," Coulson said.

"They did studies on rodents; they did studies on the blood concentrations of these chemicals in their own workers. And they sat on it all, and they affirmatively prevented other people's research from making it into the public eye. As a result, it was 2018 before anybody got around to looking in Parchment, Michigan, for these chemicals. And so, as a result of that, thousands of people were drinking it for time unknown."

3M responded to Free Press requests for an interview with an emailed statement.

"3M has dedicated substantial time and resources to researching PFAS and, to that end, we have invested more than \$600 million on research, technology, and clean-up efforts related to PFAS," company officials stated. "As a responsible steward of our community, we have a record of sharing information we learn with government regulators, the scientific community, as well as local and federal officials."

"As a precautionary measure, approximately 25 women of childbearing potential have received job reassignments at the 3M Decatur plant this week so they will not be exposed to a type of fluorochemical that can cause birth defects in rats," 3M stated in a draft news release dated April 15, 1981.

"Preliminary results from a recent 3M toxicology study showed that three related fluorochemicals affected eye development in the fetuses of rats, according to Phil Rath, manager of the Chemical Resources Division plant."

3M would market and sell PFAS chemicals for two more decades, with no EPA action to stop it.

Warnings unheeded for years

The DEQ's Delaney started sounding the alarm over PFAS contamination long before the state took the actions it's taking now.

The Wurtsmith Air Force Base in Oscoda shut down in June 1993 after 70 years of operation, a casualty of the end of the Cold War with the Soviet Union.

As the base for years hosted nuclear-armed B-52 bombers, personnel trained for rapid response to an aircraft fire.

"Weekly, they would go out and pour airplane fuel on the ground, basically diesel, and light it," Delaney said. "And they would put it out with firefighting foam, for practice for their airmen."



Show caption

Robert Delaney of Michigan Department of Environmental Quality speaks with Oscoda residents during an open house meeting regarding the contamination at the former Wurtsmith Air...RYAN GARZA, DETROIT FREE PRESS

The Air Force, as it worked on environmental cleanups around the base before and after its closure, had told the DEQ that it had looked at the fire training areas and determined the firefighting foam wasn't a concern, that it could be broken down with bio-treatments — "basically, that the bugs ate the stuff up," Delaney said.

"There was never any concern about what they were fighting the fires with. It was all about the fuels, the spent solvents and other things that had gotten on the ground, and gotten into the groundwater."

Then Delaney attended a conference in Florida on emerging contaminants in 2010, and learned about problems related to persistent firefighting foam contamination. He went back to Oscoda and asked a consultant to get some groundwater samples at the shuttered base's fire training area, and to find a lab that could test for PFAS.

"I'm thinking these things are gone, because they are surfactants — it's essentially a soap," Delaney said. "I'm thinking they are going to be flushed away. But nope, they are there at relatively high levels."

A state toxicologist put the recommended cleanup criteria at 60 parts per trillion. A part per trillion equals one drop in 20 Olympic-size swimming pools.

"When we start talking parts per trillion, that means something is extremely toxic and dangerous," Delaney said. "I realized, I've got this big problem dealing with the Air Force now. I've got to go and tell them that they're not done."

Delaney spent the rest of that year reading everything he could on PFAS and what was known about its danger. Up until the end of 2010, he said he was "just like everybody else," believing America had the strongest environmental safeguards anywhere, preventing new problems from emerging and allowing for cleanup of old problems.

"But in 2010, that worldview was shattered," he said.

"I became convinced by the end of the year that these things were really, really dangerous. ... I felt nobody realizes this. I honestly felt like I was looking down into the abyss."

Delaney prepared a slide show for DEQ management about the problem in February 2011. The agency later that year sampled fish in waters around the Wurtsmith base. The results came back on May 2, 2012, and fish were so contaminated that the district health department, that same day, put out "do not eat the fish" advisories for ponds in Clark's Marsh near the base and a nearby stretch of the Au Sable River for resident, non-migratory fish.

That spurred the Air Force into action on PFAS at the base, Delaney said. But the Air Force's limited efforts to contain the contamination weren't stopping it from emanating off the base and into the nearby community's groundwater, rivers and lakes.

By 2012, turnover at the DEQ left few around who'd seen Delaney's 2011 slide show presentation.

"It started dragging on and on," Delaney said. "I saw the department not doing anything."

'There will be many other sites in Michigan'

By August 2012, with the assistance of University of Colorado toxicologist Richard DeGrandchamp, Delaney had followed through on a promise to prepare a report for new DEQ Director Dan Wyant.

"There will be many other sites in Michigan that contain high levels of PFCs (per- or polyfluorinated compounds) in the environment and in biota (animal and plant life) and potentially in citizens of the state," Delaney prophetically stated in the report to Wyant and others at the DEQ. The report later added, "Communities with fire training facilities, other Department of Defense (DOD) bases, metal platers, other major airports, major transportation corridors, and other industrialized areas all could have extensive contamination by PFCs."

"When my report landed on (Wyant's) desk, they didn't know what to do with it, I think," Delaney said.

The DEQ began a statewide reconnaissance study of PFAS in fish and water in June 2013, according to a timeline the agency provided the Free Press. Sampling was completed one year later, and "do not eat the fish" advisories were issued on the Flint River and Rogue River in Rockford by 2014.

In Delaney's opinion, however, not much else was happening. The agency was not driving any concerted look at other military sites, airports, fire halls or other locations where PFAS compounds might be throughout the state, he said.

In the fall of 2017, a retired DEQ employee shared Delaney's white paper with Steve Gruber, a Lansing radio talk show host. By October, Gruber had Delaney on his show. Less than a month later, Gov. Rick Snyder announced the Michigan PFAS Action Response Team, MPART, which included the state departments of Environmental Quality, Health and Human Services, Military and Veterans Affairs and Agriculture and Rural Development. The group began undertaking an assessment of all municipal water supplies in the state of Michigan for 24 PFAS compounds, the first such statewide examination anywhere in the country.

An MPART science advisory panel, led by Brown University epidemiologist and toxicologist David Savitz, last December found that the 70 parts per trillion EPA health advisory limit, upon which Michigan is relying as a regulatory standard, is likely not protective enough of human health.

Delaney said he has come to believe that widespread chemical contamination is contributing to the crisis of emerging diseases and disorders in America and elsewhere.

"Our bodies are incredibly fine-tuned instruments," he said. "And if you start screwing around with chemicals our bodies have never seen, our bodies don't know how to process it. We can't break these chemicals down — our bodies were never designed to do that. So if they somehow interfere, you can have a huge problem."

In 1951, DuPont's Teflon was frequently turning out too lumpy in the manufacturing process. The company began using another PFAS chemical from 3M as a smoothing agent, known as perfluorooctanoic acid, or PFOA. It was also called C8, as the compound contained eight carbon molecules. It would soon be found in many PFAS-containing products, including ScotchGard protector, a stain repellent 3M began marketing in 1956. Five years later, in 1961, the federal Food and Drug Administration approves using DuPont's Teflon product to create nonstick cookware. Both consumer products take off in popularity.

'The kinds of things that make you fall to sleep at night and cry'

Despite the statewide warning flags Delaney had been waving in Oscoda since 2010, it was an odd coincidence that thrust Belmont and the northern Kent County PFAS problem into the spotlight about seven years later.

The Department of Defense, by 2017, had ordered all of its installations nationwide to test for the presence of PFAS compounds. That included the Belmont Armory, a former church.

"That armory was only used for band practice — they didn't do any firefighting training," said DEQ environmental quality analyst Karen Vorce.

But the armory came back as a hit for PFAS contamination, beyond the 70 parts per trillion EPA health advisory limit — not because of military contamination, but because of the nearby, closed, leaching landfill for Wolverine Worldwide's PFAS-laden tannery sludge.

"That really gave us the data to show to Wolverine, to say, 'You need to do this (neighborhood water testing) fast, and get on this,' " Vorce said.

It was a June day in 2017, a little more than a year after her husband's death from liver cancer, when Sandy Wynn-Stelt was met at her mailbox on House Street by DEQ staff, who asked whether they could test her home's water.

"They were saying, 'It's just out of an abundance of caution,' " she said.

Three weeks after testing, Wynn-Stelt got a call from a district health department official, who wanted to set up a meeting in her home with the health department, DEQ, a toxicologist and some others.

"I knew it wasn't good because you never get a committee to your house to give you results," she said.

As they told her of the sky-high PFAS levels in her drinking water, no one in the committee meeting mentioned Wolverine Worldwide, or the former landfill across the street, Wynn-Stelt said.

"Then we (contaminated House Street residents) got water and gift cards dropped off," she said. "And we were told that these were dropped off by Wolverine Worldwide. I think they said something like they are not taking responsibility for it, but they are trying to be good neighbors."

Only later did Wynn-Stelt find out about the long-closed sludge dump across the street, used in the 1960s.

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Hundreds of barrels of dirt sample collected from a former Wolverine World Wide tannery site in Rockford, March 1, 2019. JUNFU HAN, DETROIT FREE PRESS

Thirty-five houses along House Street tested high for PFAS compounds that summer, including Wynn-Stelt's 76,000 parts per trillion reading. Plumes have been discovered throughout about a 25-square-mile area, going in different directions from the tannery and at least two landfills. The DEQ has not yet defined the outer edges of the contamination plumes.

All told, 536 homes in the area have received whole-house, granulated activated carbon filtration systems for their water.

Tim and Jill Osbeck live in the Wellington Ridge development, about a mile from the North Kent Landfill, where Wolverine Worldwide also disposed of its sludge. Their home's well water initially tested at about 8,900 parts per trillion for PFAS compounds. It has since tested as high as 17,600 parts per trillion.

"You get angry; very angry," Jill Osbeck said. "You feel violated, when you think that your drinking water's been clean. And you think about, our kids were here, when they were younger, drinking it on a regular basis. And then our grandkids — we were feeding them formula bottles with our water. It gets you emotionally, very much so."

Now the Osbecks must build their life around weekly water tests and quarterly filter changes on the whole-house filtration system since installed in their home by Wolverine Worldwide's consultants. Their next-door neighbors, however, had only 3 parts per trillion of PFAS compounds in their well water.

"It's just the plume that you've hit," Tim Osbeck said.

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Show caption

"There is a lot of fear in the unknown. You don't know how long we have been exposed. We don't know yet the levels that...RYAN GARZA, DETROIT FREE PRESS

Meanwhile, Wolverine Worldwide is claiming it's a victim of 3M as well, suing the company in late 2018 for "concealing information about Scotchgard and causing environmental issues."

Wolverine officials, in response to requests for an interview, referred the Free Press to a company statement:

"From the start, we've taken proactive, aggressive actions to ensure all affected residents have access to safe drinking water. In addition, we have worked closely with U.S. EPA, MDEQ, and other regulators to test sites for the presence of PFOA and PFOS, two of the chemicals contained in 3M Scotchgard used in Wolverine's legacy operations. Most recently, we've taken legal action against 3M, which profited for decades from the manufacture and sale of Scotchgard to Wolverine and millions of others, yet refuses to take responsibility for the consequences."

The statement also notes that Wolverine has sampled more than 1,500 nearby residential wells, and provided more than 700 whole-house or point-of-use water filtration systems to affected residents.

Today, the PFAS-laden waste material at the House Street landfill and other sites in the Kent County contamination zone is still there, still emanating PFAS into groundwater. The EPA worked last year to characterize the type and extent of the waste, and plans to begin the work to remove it later this year.

Wynn-Stelt now looks out her window at the Christmas tree farm across House Street and feels far different emotions today.

"For all the years I lived here, no one came and told us what was disposed of there, when they knew it was dangerous," she said. "None of that information was ever shared with me."

"Those are the kinds of things that make you fall to sleep at night and cry, because you wonder: Had they told me that 20 years ago, would my life be different now?"

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E&E News

EPA floats plan to clean up 2 nonstick toxins

Ariana Figueroa, Corbin Hiar

Posted: April 25, 2019

EPA this afternoon proposed cleanup guidance for groundwater contaminated by certain toxic nonstick chemicals that recommends reducing the substances to levels the agency previously determined pose no health risks.

The draft interim recommendations for PFOA and PFOS — the two best-known types of per- and polyfluoroalkyl substances, or PFAS — don't include any emergency response provisions and are less protective than those called for by the Department of Health and Human Services and some states, critics noted.

The agency's current 70-parts-per-trillion health advisory would be the preliminary remediation goal for PFOA- and PFOS-contaminated groundwater "that is a current or potential source of drinking water," the recommendations say.

"In situations where groundwater is being used for drinking water, EPA expects that responsible parties will address levels of PFOA and/or PFOS over 70 ppt," the guidance says.

The agency also recommended a lower 40 ppt screening level for PFOA and PFOS at sites where more than one contaminant is found.

The chemicals are found in military firefighting foam and kitchenware appliances, and are linked to cancer and thyroid problems.

EPA Administrator Andrew Wheeler in a statement described the guidance as "a critical tool for our state, tribal and local partners to use to address these chemicals."

But Delaware Sen. Tom Carper, the top Democrat on the Environment and Public Works Committee, bashed EPA's slow response to addressing the two specific substances and the broader dangers posed by PFAS.

"The draft guidance finally released by EPA fails to adequately protect public health from this emerging crisis," Carper said in a statement.

The senator specifically pointed to its lack of a removal level of PFAS that would trigger the provision of bottled water or other urgent measures to protect affected communities. Without such a provision, Carper said, people could have little choice but to drink water contaminated at levels well in excess of 70 ppt during the months or years a cleanup could take to complete.

Public health advocates also slammed the draft document.

"This proposal is not a serious response to a drinking water contamination crisis that has already ballooned out of control," Environmental Working Group senior scientist David Andrews said in a release. "It is a Band-Aid, at best, that does essentially nothing to help the hundreds — perhaps thousands — of communities, in almost every state, with contaminated tap water."

Many states are already moving to implement stricter limits on PFOA and PFOS in drinking water. New Jersey, for example, plans to impose firm maximum contaminant levels for PFOA and PFOS at 14 ppt and 13 ppt, respectively (Greenwire, March 4).

Last year, the Department of Health and Human Services' Agency for Toxic Substances and Disease Registry said so-called minimum risk levels for the toxins should be seven to 10 times lower than standards set by EPA in 2016, with the lowest level at 12 ppt (Greenwire, June 20, 2018).

Comments on the interim guidance are due by June 10.

Environmental Working Group

EPA's Proposed PFAS Guidance Falls Far Short on Public Health Protection and Cleanup

<https://www.ewg.org/release/epa-s-proposed-pfas-guidance-falls-far-short-public-health-protection-and-cleanup>

Alex Formuzis

Posted: April 25, 2019

WASHINGTON – The draft interim recommendations for cleanup of the toxic fluorinated chemicals known as PFAS, announced today by Environmental Protection Agency chief Andrew Wheeler, are a woefully inadequate response to the growing nationwide crisis of drinking water contaminated with PFAS, said EWG Senior Scientist David Andrews.

“This proposal is not a serious response to a drinking water contamination crisis that has already ballooned out of control,” said Andrews. “It is a Band-Aid, at best, that does essentially nothing to help the hundreds – perhaps thousands – of communities, in almost every state, with contaminated tap water. Americans need real and swift action to address this crisis, not more toothless proposals from the Trump administration.”

Wheeler’s proposal falls short in three significant ways:

- It does not declare PFAS chemicals to be hazardous substances under the Superfund cleanup law.
- It does not legally require the chemical industry or Pentagon to clean up contaminated industrial sites, dumps or military facilities.
- It recommends cleanup of groundwater to 70 or 40 parts per trillion, or ppt, based on EPA’s non-binding lifetime health advisory level for drinking water. Studies by the federal Agency for Toxic Substances and Disease Control, scientists for a number of states, and private researchers have found that those levels are far too high to protect public health. Many states, such as New Jersey, New York and Vermont, have proposed drinking water and groundwater standards at or near 20 ppt for the combined level of PFOA and PFOS – the two most notorious of the hundreds of PFAS chemicals in current use.

EWG has called on the Trump administration and Congress to take a series of steps to protect the public from further exposure to PFAS chemicals, including directing the military to quickly clean up contaminated bases, make polluters pay their fair share, add PFAS to the Superfund cleanup law and set an enforceable, health-protective limit for tap water.

Governing

As States Weigh Banning a Popular Pesticide, EPA Fights to Keep It on the Market

<https://www.governing.com/topics/transportation-infrastructure/khn-states-weight-ban-on-pesticide.html>

Ana B. Ibarra, Haiser Health News

Posted: 7:200am, April 25, 2019

Lawmakers in several states are trying to ban a widely used pesticide that the Environmental Protection Agency is fighting to keep on the market.

The pesticide, chlorpyrifos, kills insects on contact by attacking their nervous systems.

Several studies have linked prenatal exposure of chlorpyrifos to lower birth weights, lower IQs, attention deficit hyperactivity disorder and other developmental issues in children. But the EPA in 2017 ignored the conclusions of its scientists and rejected a proposal made during the Obama administration to ban its use in fields and orchards.

Hawaii was the first state to pass a full ban last year. Now California, Oregon, New York and Connecticut are trying to do the same.

Should California succeed, the rear-guard action could have a big impact.

"If California is successful, that's a big deal because it's such a big state — the biggest agricultural state," said Virginia Ruiz, director of occupational and environmental health at the Washington, D.C.-based nonprofit Farmworker Justice.

Earlier this year, congressional Democrats also introduced bills to ban the pesticide nationally, but experts believe states are more likely to succeed than Congress. Sen. Kirsten Gillibrand (D-N.Y.), who is running for president, introduced a separate bill last week that would prohibit schools from serving fruits and vegetables sprayed with the pesticide.

"I don't see this as something we should still be debating," said Irva Hertz-Picciotto, an epidemiologist and director of the Environmental Health Sciences Center at the University of California-Davis.

Hertz-Picciotto testified during a California Senate Health Committee hearing April 10 on California's bill to ban the use of the pesticide. She said more than three dozen studies have demonstrated a connection between prenatal exposure of chlorpyrifos and developmental disabilities, including symptoms of autism.

"No study has identified a level at which we can consider it safe," she told lawmakers.

Almost two decades ago, the EPA, which regulates pesticides at the federal level, ordered chlorpyrifos for residential use off the market. But the chemical still is used on crops — including citrus, almonds and grapes — and on golf courses and other non-agricultural settings.

Globally, several companies make chlorpyrifos products. In the U.S., the most recognized brand names are Dursban and Lorsban, manufactured by Corteva Agriscience, formerly known as Dow AgroSciences.

Under the administration of President Barack Obama, the EPA in 2015 proposed a complete ban of chlorpyrifos, citing evidence of health risks. But in 2017, President Donald Trump's EPA administrator, Scott Pruitt, declined to ban it.

"Despite several years of study, the science addressing neurodevelopmental effects remains unresolved," the EPA says on its website. The agency did not return requests for comment.

Then the 9th U.S. Circuit Court of Appeals ordered the pesticide completely off the market last summer. The EPA is fighting that decision.

"The EPA is contradicting the findings of its own scientists," said Aseem Prakash, the director of the Center for Environmental Politics at the University of Washington.

Prakash accused the EPA of serving the interests of the chemical industry over people's health.

"It's bizarre," he added. "We have the research."

The manufacturers see it differently. Carol Burns, a retired epidemiologist with the Dow Chemical Company, which began manufacturing chlorpyrifos in 1965, is now a consultant for Corteva Agriscience. Burns said during the California Senate hearing that many studies link neurodevelopmental problems in children with the chemical compounds known as organophosphates, but not chlorpyrifos specifically.

"Chlorpyrifos is an organophosphate, but not all organophosphates are chlorpyrifos," she said. The science, she argued, is not clear-cut.

Besides, she added, some of those studies focused on children born in the late 1990s and early 2000s. Since then, children face less exposure to the chemical as a result of increasing restrictions on its use, Burns said.

Neither Corteva Agriscience nor the California Farm Bureau Federation would comment for this story.

Chlorpyrifos can be inhaled during application and as it drifts into nearby areas, or ingested as residue on food. People also can be exposed through their drinking water if their wells have been contaminated.

Brief exposure can result in dizziness, nausea and headaches, while more acute poisoning can cause vomiting, tremors and loss of coordination, according to the National Pesticide Information Center.

But long-term exposure, even at low levels, is considered more harmful, especially for young, developing brains. A 2014 study by Hertz-Picciotto and other UC-Davis researchers found that pregnant women who lived near fields treated with chlorpyrifos, primarily during their second trimester, had an elevated risk of giving birth to a child with autism spectrum disorder.

Fidelia Morales has lived in Lindsay, Calif., a small town in Tulare County, for 12 years. Her home is surrounded by orange groves, and the skunky stench of freshly sprayed pesticides often drifts inside, especially during the summer, she said.

The more she learns about chlorpyrifos, the more she wonders whether it played a role in her 11-year-old son's behavioral issues. His teachers routinely complain about his inability to focus and sit still in class, she said. In fourth grade, he was reading at a second-grade level.

"I used to walk to the groves when I was pregnant — I had no idea that I could be exposing myself and my baby," she said. "The irony is I left Los Angeles in part to get away from all the pollution. I had no idea I'd end up somewhere worse."

Morales wants the pesticide banned.

But farmers have told lawmakers that chlorpyrifos is a “last-resort” pesticide, one that’s important for them to have in their toolbox in case of a disease outbreak. They pointed to the Asian citrus psyllid, a tiny insect that feeds on citrus leaves and can transmit disease known as Huanglongbing, or citrus greening, which poses a serious threat to the citrus industry.

Chlorpyrifos is the most effective treatment for that pest, they said.

Farmers also testified that the state already restricts the use of chlorpyrifos through the Department of Pesticide Regulation. Any additional restrictions should be left to the department, they urged.

Based on the department’s recommendations, all California counties this year agreed to set strict restrictions on chlorpyrifos’ application.

They include a ban on aerial spraying. For ground-based applications, farmers cannot apply the pesticide within 150 feet of houses, businesses and schools. The department considers the pesticide a “toxic air contaminant,” and believes the new restrictions will reduce its use, said spokeswoman Charlotte Fadipe.

The use of chlorpyrifos in the state has declined by half in the past decade, she said.

Angel Garcia, a community organizer in Tulare County with the group Californians for Pesticide Reform, said the new restrictions aren’t tough enough.

Those who face the most risk are largely the low-income people of color who live in agricultural areas, he said.

The restrictions “fall short of creating significant health protections,” he said.

Minnesota Public Radio News

Chemical Safety Board calls on EPA to update hydrofluoric acid study in wake of Husky Fires

<https://www.mprnews.org/story/2019/04/25/wpr-chemical-safety-board-calls-on-epa-to-update-hydrofluoric-acid-study-husky-fires>

Daniella Kaeding, Wisconsin Public Radio

Posted: April 25, 2019

The U.S. Chemical Safety Board is calling on the U.S. Environmental Protection Agency to revisit a 1993 study on hydrofluoric acid in the wake of an explosion and series of fires at the Husky Energy oil refinery in Superior last year.

Kristen Kulinowski, the CSB's interim executive, said the agency should examine existing regulations and risk management procedures.

"We'd also like them to examine the possibility of replacing this material with inherently safer alkylation technologies, which are now coming online and being tested in some facilities around the country," she said.

In 1990, Congress passed amendments to the Clean Air Act that required the EPA to promulgate its risk management plan rule, process safety management for the Occupational Safety and Health Administration, and create the Chemical Safety Board. The idea was those elements would provide a framework to protect workers and communities from the release of hazardous materials, as well as identify the reasons behind accidents and recommendations to prevent them.

"Over the years, the CSB has found some deficiencies in the application of these programs in or in fact in some of the elements," Kulinowski said.

She said in some cases they saw failures in the application of those standards while in other circumstances the standards didn't anticipate the hazards that may exist at sites.

"In this case, hydrofluoric acid is recognized in the regulatory framework as a hazardous substance, and there are programs to control and manage the risks," she said. "But, we find that despite these programs we still have incidents that occur across the country on a weekly basis -- certainly serious incidents less frequently than that. But, these programs are not alone sufficient to protect communities from all the hazardous substances that may be in their midst."

Kulinowski said they hope the EPA will update its study to prevent further incidents similar to the refineries in Torrance, Calif., and Superior.

"We would like to see the protective action taken before we have to suffer some terrible tragedy, and we're hoping that EPA agrees and takes a fresh look at HF, the risk management plans and potentially safer alternatives," she said.

An EPA spokeswoman said the agency is reviewing the CSB's letter.

Congress directed the EPA to conduct the study in 1990 to pinpoint impacts to the environment and human health. Since then, an explosion at the ExxonMobil refinery in Torrance, California occurred in its fluid catalytic cracking unit in 2015, which is similar to the explosion that occurred at Husky's refinery in Superior last year.

Hydrofluoric acid, which is also known as hydrogen fluoride, is a highly toxic chemical that can be hazardous to human health if released. The chemical can kill at concentrations of 30 parts per million, according to the CSB.

In a statement Wednesday, Husky spokesman Mel Duvall said the company appreciates the value the CSB provides to promote safety across the industry.

"The hydrogen fluoride (HF) safety systems in place in April 2018 operated as designed during the incident and there was no release of HF," Duvall wrote in an email. "The refinery has already installed additional protective measures, such as a laser detection system."

Duvall added the company also plans to add a rapid acid transfer system to transfer the chemical to another holding tank in the event of a release. He said they also plan to incorporate more layers of water mitigation that may include additional water curtains or cannons, as well as enhanced leak detection.

"The refinery has safely used HF for almost 60 years, and the proposed additional safety features and modernizations will further enhance safety for the refinery and our neighbors," wrote Duvall.

Fears over a potential release of the chemical prompted the evacuation of Superior residents last spring. Debris from the explosion came within 150 feet of the hydrogen fluoride tank.

Around one-third of the nation's 150 refineries still use the chemical in its refining process. The chemical is used as a catalyst in producing high octane gasoline.

More than one-third of roughly 1,600 Superior residents surveyed this winter by a local activist group said they would like to see the use of hydrogen fluoride banned in the city. Three dozen people were injured as a result of the explosion last April, according to the CSB's update on its findings last August.

Kulinowski said recent incidents in Houston, Texas, have delayed the completion of other open investigations, including the CSB's investigation into the Husky refinery incident.

In March, several ground storage tanks were engulfed in flames at the Intercontinental Terminals Company site in Deer Park Texas, near Houston.

"We're diligently working on all of our investigations, and we expect the Husky report to be released hopefully at the end of this calendar year," she said.

Safety and Health Magazine

Advocacy groups sue EPA over worker exclusion from methylene chloride ban

<https://www.safetyandhealthmagazine.com/articles/18360-citing-fatalities-advocacy-groups-sue-epa-over-worker-exclusion-from-methylene-chloride-ban>

Staff

Posted: April 25, 2019

Washington — A coalition of groups representing worker rights has [filed a lawsuit](#) against the Environmental Protection Agency and Administrator Andrew Wheeler for not including workers in the agency's [final rule](#) banning methylene chloride for consumer use.

The groups, which filed a petition for review April 18 in the U.S. Court of Appeals for the 2nd Circuit, allege that the rule leaves thousands of [workers at risk](#) by not finalizing a previous proposal related to commercial paint and coating removal.

Published in the March 27 *Federal Register*, the final rule prohibits manufacture (including import), processing and distribution of methylene chloride in paint removers for consumer use and requires manufacturers, processors and distributors to notify retailers and others in the supply chain about the ban.

However, in contrast to a proposed rule issued in January 2017, EPA is not finalizing "a determination of unreasonable risk from the use of methylene chloride in commercial paint and coating removal," the final rule states.

In 2014, EPA found that exposure to methylene chloride — frequently used for bathtub refinishing — may cause adverse health effects, including cancer, harm to the central nervous system and toxicity to the liver. The rule states that EPA is aware of four fatalities linked to the substance in paint and coating removal since publication of the proposed rule, as well as 49 from 1976 to 2016.

The lawsuit petitioners include Earthjustice, on behalf of the Labor Council for Latin American Advancement; the Natural Resources Defense Council; Safer Chemicals, Healthy Families; and the Vermont Public Interest Research Group. Also listed are Lauren Atkins and Wendy Hartley, whose adult sons died from methylene chloride exposure, according to an April 23 Earthjustice press release.

"If dozens of confirmed deaths are not enough to get the Trump administration to protect workers from methylene chloride paint strippers, nothing short of a court order will," Jonathan Kalmuss-Katz, an attorney for Earthjustice, said in the release. "There is no law, science or policy behind the exclusion of workers from EPA's methylene chloride rule. It is a craven and illegal giveaway to companies that want to continue to manufacture and sell deadly paint strippers."

In May 2018, EPA issued a press release indicating that the agency planned to submit finalized rulemaking of the consumer and commercial ban to the White House Office of Management and Budget "shortly."

On behalf of LCLAA and NRDC, Earthjustice in February filed a lawsuit against EPA and Wheeler in the U.S. District Court for the Southern District of New York, challenging the ban's delay.

Methylene chloride is among the first 10 chemicals EPA is evaluating for potential health and environmental risks under the Frank R. Lautenberg Chemical Safety for the 21st Century Act. In the March 27 *Federal Register*, EPA published an advance notice of proposed rulemaking seeking public comment on potential training, certification and limited access program guidelines for commercial use of the chemical.

Comments on the ANPRM are due May 28, the same day the final rule is set to take effect.

Water

Bloomberg Environment

Wall Street Likes Water Projects Thanks to EPA Loan Programs

<https://news.bloombergenvironment.com/environment-and-energy/wall-street-likes-water-thanks-to-epa-assistance>

David Schultz

Posted: 5:24pm, April 25, 2019

- Financial analysts say default rates for city water projects are low
- 'Ironclad' restrictions on how revolving loan fund money can be used

Water infrastructure looks like a winning bet for investors, and that's due, in large part, to strong federal assistance for many of these projects, three investment analysts say.

An EPA water infrastructure loan program called the state revolving fund has helped keep default rates for these types of projects exceptionally low, and many investors are looking for ways to supplement that financing by lending additional money, the analysts said.

"The outlook for the water infrastructure business is very good," Tom Liu, a managing director at Bank of America Merrill Lynch, said at an April 24 infrastructure financing conference in Washington.

Water projects have some of the lowest default rates within the broader municipal lending sector, which itself has a much lower default rate than the corporate sector, he said.

"Investors recognize that and that's why we see a lot of demand," Liu said.

'Big Pot of Money'

The Environmental Protection Agency's state revolving funds—one for drinking water and one for wastewater—are typically the largest single line-item in the agency's budget every year when considered together. They give out grants to states who then turn around and use the financing to capitalize low-interest loans to water utilities.

These loans can be used to upgrade water treatment plants, replace pipes, and many other capital projects. However, they can't be used for operations or maintenance or for anything outside of the water sector.

Jessica Cameron Mitchell, a managing director with the asset management firm PFM, said one of the benefits of the program is the ironclad legal restrictions on how the loans can be spent.

"The money is not going anywhere," Mitchell said. "There's been numerous times where a legislator has said, 'There's a big pot of money there, can I have that?' And the answer is, 'No, you can't.'"

High Bond Ratings

Because default rates are so low and because appropriations from Congress for the program are so regular, some states have used the stability of the state revolving funds to leverage additional financing for water projects from the private sector.

They can leverage this financing at very low interest rates because all state revolving funds have Aaa bond ratings, according to Omar Ouzidane, a vice president and senior analyst with Moody's Investors Service.

If anything, he said, these state programs are over-collateralized. The state revolving funds "are strong," Ouzidane said. "In my opinion, they do deserve the Aaa."

To contact the reporter on this story: David Schultz in Washington at dschultz@bloombergenvironment.com

The Hill

Dirtiest week for water in EPA history

<https://thehill.com/opinion/energy-environment/440566-dirtiest-week-for-water-in-epa-history>

Jim Murrphy

Posted: 7:00am, April 25, 2019

Before the Clean Water Act was passed in 1972, our nation's waters were in trouble. Lake Erie was virtually dead, the Cuyahoga River caught on fire, and the Androscoggin River in Maine was so polluted it peeled paint on nearby buildings. Many of America's waters had become little more than lifeless, open sewers.

Nobody wants to return to the bad old days of polluted, dirty rivers. Nobody, it seems, except the very agency in charge of protecting our waters.

After nearly a half-century of successfully collaborating with states to implement the Clean Water Act, we have just experienced the dirtiest week for water in the Environmental Protection Agency's history – a three-pronged attack on the Clean Water Act's ability to keep our water safe and clean.

First, the EPA closed a notably short period for public comment on a proposed rule that would eliminate protections for half of America's wetlands and countless miles of smaller streams that provide drinking water for millions and serve as the lifeblood of larger streams and rivers. This rule denies the basic science that water flows downhill and that pollution upstream ends up in larger rivers. Similarly, wetlands are the filters and sponges of our aquatic systems. Allowing them to be drained and destroyed for parking lots, corn fields and other uses mean more pollution, larger floods and less habitat for wildlife.

But that was not all. The EPA also announced in an "interpretive statement" that Clean Water Act protections would no longer apply to pollution or sewage discharged into underground wells or aquifers — even if the polluted discharge flows directly into drinking water sources such as lakes or rivers.

Finally, all this happened within days of an order from President Trump instructing the EPA to tie states' hands in protecting local water quality by constraining the time and information they have to decide whether to approve or veto polluting projects. This will limit the ability of states to object to federally permitted projects, like new reservoirs or oil and gas pipelines, which can be harmful to water quality.

Sadly, this dirtiest of dirty water weeks is par for the course for this administration. In the last two years, we've seen attack after attack on clean water with attempts to whittle away decades-old safeguards.

For example, the Trump administration is re-writing the rules to restrict EPA's express authority under the Clean Water Act to block projects with unacceptable environmental impacts. Although it has been used just 13 times, EPA's actions have saved 210,000 acres of wetlands and 36 miles of rivers and streams in 11 states. Now EPA Administrator Andrew Wheeler is contemplating overturning a veto from the George W. Bush administration that blocked a particularly egregious wetland drainage project known as the Yazoo Backwater Pumps.

And the list continues. The Army Corps has also drafted new guidance — which has not been made available to the public for input — restricting the time states have to review Clean Water Act permits to dredge or fill wetlands and streams. And the U.S. Department of Agriculture issued an interim final rule that makes it easier for landowners to drain seasonal wetlands while still receiving federal farm bill subsidies.

The public opposes these types of attacks on the nation's waters. For example, more than half a million Americans spoke out against the proposed reductions to the scope of the Clean Water Act — despite the short public comment period. We cannot do without clean drinking water. And we can't afford to have an administration or an EPA that are willing to risk the health and well-being of all Americans to benefit a few industries that seek to profit from fouling our waters.

Jim Murphy is the director of legal advocacy for the National Wildlife Federation.

Inside EPA

Eased EPCRA Provisions May Bolster EPA Plan To Decline CWA Spill Rule

<https://insideepa.com/daily-news/eased-epcra-provisions-may-bolster-epa-plan-decline-cwa-spill-rule>

Lara Beaven

Posted: April 25, 2019

Recent congressional amendments to federal emergency response requirements, which aim to provide easier access to chemical spill information for drinking water utilities, could bolster EPA's arguments in rejecting environmentalists' bid to require a Clean Water Act (CWA) spill rule that existing requirements adequately address the issue.

But drinking water utilities, while backing the congressional changes to emergency response requirements, continue to criticize EPA's plan declining to craft a CWA spill rule, saying Congress required the agency to take additional steps. One drinking water source says the EPCRA change is "not perfect, but it's a start that compliments" other recent statutory changes requiring drinking water utilities to conduct risk assessments for built, technological and financial infrastructure and develop emergency response plans.

EPA recently released a [fact sheet](#) explaining congressional changes to the Emergency Planning and Community Right-To-Know Act (EPCRA) that were contained in the 2018 water resources development act, also known as America's Water Infrastructure Act.

The changes stem in part from concerns raised in the wake of the 2014 spill of 10,000 gallons of coal-cleaning chemical 4-methylcyclohexane methanol and a mixture of glycol ethers from an above-ground tank run by Freedom Industries into West Virginia's Elk River, upstream from Charleston's water utility.

The spill -- from a facility that had not been inspected since 1991 -- contaminated the city's potable water supply for days, leaving businesses and residences reliant on bottled water.

The new EPCRA requirements, which went into effect last year, require state and tribal emergency response commissions to notify the applicable state drinking water regulatory agency of any reportable releases and provide community water systems with hazardous chemical inventory data.

EPA in the fact sheet says that if a community water system receives prompt notification, it may be able to take actions to prevent or minimize the impacts associated with contaminated water from entering its system.

Additionally, a community water system can proactively plan for potential releases if they have access to hazardous chemical inventories in their source water protection area, the fact sheet says. Having access to this information, combined with other relevant information, allows them to characterize the risk of upstream contamination threats and prioritize source water protection activities.

The Elk River spill also prompted environmentalists to sue EPA to force the development of a rule under CWA section 311(j)(1) to impose new requirements to limit spills of oil and hazardous substances from onshore facilities. The suit [led to a settlement](#) under which EPA agreed to propose a spill rule by 2018.

But last year, EPA [issued a proposal](#) that said no new rule is needed because current policies already cover all the requirements that a comprehensive spill policy would include, prompting outrage from environmentalists and drinking water utilities.

Environmentalists in March [filed new litigation](#), arguing that EPA's proposal to forgo developing a spill rule defies both Congress' clear intent in the 1990 CWA update and a pattern of recent storms and floods that they argue shows the need for better spill prevention.

Additional Steps

Drinking water utility groups in written comments on EPA's proposal criticized the agency's cost-benefit and regulatory analyses, echoing environmentalists' arguments that the "no action" proposal is not in keeping with congressional intent.

While drinking water utilities called for the EPCRA changes and are pleased they were enacted, they also say additional steps are needed to protect drinking water sources from chemical spills.

The American Water Works Association (AWWA), which represents both municipal and investor-owned utilities, said in [its written comments](#) last year that there is inadequate information sharing with downstream drinking water supplies to plan for potential hazards, a lack of timely notification of downstream water systems when release events occur, and a lack of spill prevention and countermeasures.

The EPCRA revisions address, at least in part, the first two concerns but not spill prevention.

Additionally, AWWA noted that 2016 revisions to the Toxic Substances Control Act required EPA to develop a process to consider the hazard and exposure potential of a chemical substance or a category of chemical substances stored "near significant sources of drinking water" as a criterion against which a chemical candidate will be screened. But EPA has not yet proposed a methodology for this assessment.

"The data necessary to support the TSCA prioritization process regarding drinking water sources is complementary to data necessary to support chemical review under [CWA] section 311," AWWA said.

Both AWWA and the Association of Metropolitan Water Agencies (AMWA), which represents municipal drinking water utilities in large cities, called on EPA to redo its cost-benefit analysis and regulatory impact analysis (RIA), saying neither analysis is sufficient to justify "no action" on a CWA rule.

For example, AMWA said EPA's RIA lists both the number of people impacted by spills and the monetary costs of water contamination from a hazardous spill as "unknown."

"These are crucial components for determining the full impact of a hazardous chemical spill on a community. AMWA urges EPA to include these components in a second, more comprehensive, analysis in order to accurately determine the full impact of these spills to drinking water systems and their communities," the comments say.

AWWA said EPA made no effort to calculate the cost of such contamination even though there is data available to support this type of analysis.

The Freedom Industries incident was estimated to cost \$61 million in displaced economic productivity in the immediate four days following the spill, AWWA said. The group noted that although the chemical substances that affected 300,000 residents and businesses in Charleston, WV, are not listed as CWA hazardous substances, the impact on the community is unquestionable.

AWWA said EPA, Federal Emergency Management Agency, Centers for Disease Control and Prevention and Department of Homeland Security have all explored various scenarios and associated costs for a community placed under a "do not drink" or "do not use" advisory, the latter of which can prevent using the water supply for fire suppression. -- *Lara Beaven* (lbeaven@iwpnews.com)

Legal News Line

New York announces plans to sue EPA over issue of certificate of completion for Hudson River cleanup

<https://legalnewsline.com/stories/512441819-new-york-announces-plans-to-sue-epa-over-issue-of-certificate-of-completion-for-hudson-river-cleanup>

Carrie Bradon

Posted: April 24, 2019

ALBANY, N.Y. (Legal Newsline) — New York Attorney General Letitia James and Gov. Andrew Cuomo announced April 11 that New York will be suing the U.S. Environmental Protection Agency over the cleanup of the Hudson River.

This decision comes after the EPA issued a Certificate of Completion for General Electric's cleanup of PCB contamination in the Hudson River. The state's Department of Environmental Conservation's (DEC) study showed that the cleanup was incomplete and does not protect the public health and environment.

According to a press release from James' office, the DEC found PCB levels in fish have not recovered as result of the work and the officials allege the EPA's action of issuing the certificate is contrary to law.

"The Hudson River is critical to the environment and economy of New York," said Attorney General Letitia James in a press release. "Despite the EPA's stance, the facts remain crystal clear: the cleanup of PCBs is incomplete, and allowing GE to walk away without accountability is dangerous to the health and welfare of New Yorkers. Once again, the EPA has failed to protect the environment, and failed to protect the residents of our state, but my office will work tirelessly to ensure the cleanup and restoration of the Hudson River carries on."

The press release states both the DEC and other environmental organizations have rejected the findings of the EPA's five-year review report of the Hudson River cleanup and have asked the EPA not to issue the certificate to GE.

PoliticoPro

EPA releases groundwater cleanup guidance for PFOA and PFOS

<https://subscriber.politicopro.com/article/2019/04/epa-releases-groundwater-cleanup-guidance-for-pfoa-and-pfos-3137893>

Annie Snider

Posted: 12:52pm, April 25, 2019

EPA has released guidance on how stringently two toxic chemicals should be cleaned up at Superfund sites and other contaminated properties around the country, setting a goal that is far stricter than the Defense Department had sought. The "Draft Interim Recommendations," which were stalled in interagency review at the White House for more than seven months, sets a cleanup goal of 70 parts per trillion for the chemicals PFOA and PFOS in groundwater that is a current or potential source of drinking water. That goal matches EPA's 2016 drinking water health advisory.

"Today, we are delivering on one of our most important commitments under the PFAS Action Plan," Administrator Andrew Wheeler said in a statement.

The Defense Department, which says it has 401 sites with known or suspected contamination from the chemicals, had fought that cleanup level fiercely, arguing for a much higher standard of 400 parts per trillion, according to Senate Environment and Public Works Committee Ranking Member Tom Carper (D-Del.).

The cleanup goal is not a firm standard; under the Superfund law, cleanup levels for individual sites are set on a site-specific basis, taking into account factors like the other contaminants at the site and how the property is likely to be used in the future.

EPA said in its press release that the guidance was based on the agency's "current scientific understanding of PFAS toxicity" and would be revised "as new information becomes available."

The guidance will be open for public comment for 45 days.